

EXPERIMENTS IN
SECONDARY EDUCATION

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Edited by
E.A. PIRES

MINISTRY OF EDUCATION GOVERNMENT OF INDIA

1956

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FOREWORD

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Over three years ago, the Ministry of Education initiated a scheme for compiling an account of promising experiments carried on in the field of Secondary education in different parts of the country. All State Governments and certain other educational authorities were requested to send reports of innovations carried out in schools within their territories or under their jurisdiction.

There is no doubt that there are many defects in our existing system of Secondary education. Any system of education, in fact any human institution, is bound to have defects which become more marked with the passage of time. In the case of education in India, failings have been pointed out so often that it is hardly necessary to repeat them on this occasion. What is not realised is that in spite of many shortcomings and obstacles, devoted and able teachers have been discharging their duties with marked success. Their number is small and very often their work is not known beyond their immediate environment. It was felt that an account of their efforts and experiments will not only serve to correct many popular misconceptions about education but also be of use to other practising teachers. Such exchange of experiences would help many who are new in the field in avoiding mistakes and also strengthen others by making them feel that they are not lone workers in the field but members of a noble fellowship.

I am conscious that this account is neither exhaustive nor complete. For one reason or another, it has not been possible to include an account of every significant experiment in the field of Secondary education in India. I can myself recall several experiments in different parts of the country of which no mention has been made in this brochure. Nevertheless, it marks a significant step forward as this is perhaps the first occasion that an attempt is being made to compile a countrywide account of valuable work done by individual teachers or schools.

I am very happy to introduce this account of experiments in Secondary education prepared and edited by Dr. E. A. Pires of the Central Institute of Education, Delhi. It is my hope that all State Governments will cooperate in this effort by bringing out fuller and more detailed accounts of experiments carried on within their own boundaries.

New Delhi,
16th February, 1956.

Humayun Kabir
Educational Adviser to the
Government of India

INTRODUCTION

The purpose of this report is to present to teachers and to heads of Secondary schools some worthwhile experiments that have been conducted in Secondary schools in this country in the hope that they will be stimulated to repeat these experiments, with or without modifications, in their own schools.

The need for such experimentation cannot be overstated considering the monotonous uniformity that characterises the work being done in the vast majority of our schools. The Secondary Education Commission, referring to the defects in the existing pattern of Secondary education, have, among other things, pointed out (i) that "the education given in our schools is isolated from life;" (ii) that "it is narrow and one-sided and fails to train the whole personality of the student;" (iii) that "the methods of teaching generally practised fail to develop in the students either independence of thought or initiative in action;" and (iv) that there is little "personal contact between teachers and pupils." The Commission has stressed the need for greater experimentation and for a more liberal use of "dynamic methods of teaching". It has made eight recommendations in this respect,¹ which deal with general principles and purposes which should underline methods rather than with specific practices or techniques. In this study an attempt has been made to bring together accounts of a variety of experiments that have been actually made in a number of Secondary schools in the country, some of which are experimental schools in the sense that they enjoy a considerable measure of freedom to plan their own courses and to give what they conceive to be better education than the traditional programme provides, while the others are traditional schools which, in spite of being greatly fettered in their programmes by the restrictions imposed by their respective state departments of education, have been enterprising enough to conduct experiments within the limitations under which they have to work.

The experiments presented in this report are discussed under the following six heads :—

1. Aspects of School Administration.
2. School Organisation and Methods of Teaching.
3. The Secondary School Curriculum.

1. *Report of the Secondary Education Commission*, pp. 21-22, Ministry of Education, Government of India, 1953.

2. *Ibid.*, pp. 117-118.

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4. Co-curricular Activities.
5. Evaluation and Guidance.
6. The School and the Community.

It is understandable that some of the experiments could very well be discussed under more than one of these heads as they are related to two or more of the areas indicated above. To take only one illustration : 'adjustment classes' could be discussed both under 'School Organisation and Methods of Teaching' and under 'Evaluation and Guidance'. Then, there are some items which do not easily fit into any of the categories in the six-fold classification that has been adopted, but have to be somehow accommodated under one of them in order to avoid an unnecessarily long classification. One example of this type of item is 'school fees based on income'; another is 'facilities for earning while learning'. Both these experiments have been reported under 'Aspects of School Administration'.

Little or no attempt has been made in this report to offer a critical assessment of the experiments that are presented to the reader, the reason being that it is the experimenting and reporting schools that are in the best position to pronounce judgment on the experiments conducted by them. The schools were asked through their respective state departments of education to report significant and successful experiments made by them which, in their opinion, would be of interest and value to others; and from the accounts that come in, the editor has made a careful selection keeping in mind the number of pages prescribed by the Ministry of Education for this report. He has not omitted reporting any experiment which is really worthwhile, except when a similar experiment on more or less the same lines has been conducted elsewhere and already included.

CHAPTER I

ASPECTS OF SCHOOL ADMINISTRATION

School Fees Based on Income

At "Shreyas" in Ahmedabad, and at the Vidya Bhawan in Udaipur, the school fees are graded according to the income of the parents to enable children from poor homes to derive benefit from the educational facilities provided at the institution. Many parents of children studying at "Shreyas" pay a fee that does not even cover the cost of food supplied. Some of the "Shreyas" students receive their education and transport, and even some of their daily food, free of charge.

In a democratic society the practice of basing the school fees on the income of the parents seems to be quite fair, and schools which are in a position to attract students because of the superior type of education given by them should be able to emulate the example of these two institutions in this respect.

Earning while Learning

At the Vasanta College for Women in Banaras some of the students who are in need of monetary help are paid by the institution in return for work done by them in the library or the stores or the canteen, which are thus managed by the students with the guidance of the teachers. This not only helps needy students to prosecute their studies but also gives them a practical training and develops in them a spirit of service to the school community.

Student Government

The Report of the "Workshoppers' Seminar" held at Delhi early in 1955 observes that "Student participation in the government of the school is an effective method of citizenship training and is a means of keeping the energies of the pupils canalised for useful purposes in the development of a wholesome personality through a definite, constructive, well-planned programme". The Report of the Secondary Education Workshop held at Hyderabad in April-May 1955 states that student government gives "opportunities to pupils to learn the skill of electing leaders and of conducting their deliberations on democratic lines, thereby giving ample scope for self-expression, evaluation and judgment". According to the report submitted by the Vidya Bhawan, Udaipur, "self-government builds up the morale of the students. They develop a loyalty and a sense of responsibility towards the school. They see a purpose and a plan in school life. A love of social service is also inculcated in them.

They learn to face difficulties and to love work for its own sake.....Above all, the students develop a fellow feeling and an understanding of human nature which is a great asset in their lives".

A large number of schools have reported on their system of student government, but only some of these reports can be presented here.

(i) *Boys' Town, Nasik* :—The boys hold annual elections to elect the Mayor and the Commissioner who are fully responsible for the order and discipline of the Town. The Town has a Court Chamber, and the Mayor, the Commissioner and a representative from the staff form the panel of judges to try cases of a serious nature. The Minister for Justice, with the help of a Small Causes Court, disposes of petty offences. The house captains form the jury. The Principal, however, retains the power of veto. The accused is entitled to full defence by any student or member of the staff he may choose. The judgment is given strictly in accordance with the Boys' Town Code.

(ii) *Jeevan Bharati, Surat* :—There is a Students' Assembly which meets occasionally to discuss problems. The Assembly elects five students to work as judges. These students tackle the problem of late-coming and take care of the complaints lodged by the different secretaries. They are helped by a senior teacher who guides the proceedings. There is a Students' Committee with secretaries for *safai*, games, excursions, elocution, tiffin, the library, the reading room, and manuscript magazines. The tiffin secretary prepares the menu and the list of students for serving the tiffin.

(iii) *Vidya Bhawan, Udaipur* :—The Students' Assembly is called the *Chhatramandal*. It meets half a dozen times in the year. In these meetings students offer constructive criticism on various aspects of school life including the time-table, games, sanitation, literary activities and discipline. They also suggest new programmes of work and make requests for new facilities. The executive of the Assembly is called the *Panchayat*. The general body elects the President and the General Secretary, who in consultation with the Headmaster and the *Mushir-i-khas* (staff adviser) appoint a cabinet. The cabinet looks after the cleanliness and sanitation of the school, supervises the meals, organises games, social service and labour work, runs a savings' bank and arranges literary and social activities. There is a minister in charge of every important aspect of school life. The cabinet meets about once a fortnight and discusses the problems arising out of its work and devises ways and means of solving them. About a dozen times in the year the *Panchayat* can take a half-day off with the consent of the Headmaster and arrange

a programme of outings, games, social service and recreational activities.

(iv) *Christian High School, Kharar* :—Student government in this school is based on a written Constitution. There is a High Court for hearing appeals. The General Committee, consisting of elected class presidents and of two representatives from each class, is the executive body. The School President is elected by the boys and holds office for four months. There is a suggestion box in which the boys place suggestions which they wish to make or questions which they wish to ask. These are duly attended to by the Headmaster and answered in the monthly school magazine which is edited by the boys.

Each class, from Class V upwards, has an elected class committee consisting of a president, a member for *safai*, a member for games and sports, and a member for social service. All the disciplinary problems of the class are dealt with by this committee. It also makes arrangements for the better students to help the weaker ones. The School President checks the records maintained by the class committees as well as the General Committee.

(v) *Birla Vidya Mandir, Naini Tal* :—The Prefect or House System, which is prevalent in many public schools, is exemplified by the system of student government reported by the Birla Vidya Mandir. The school is divided into four houses, named after Gandhi, Nehru, Pant and Tagore. These are again subdivided into eight *niwases* which bear the names of Shivaji, Rajendra, Kabir, Pratap, Tulsi, Nanak, Vyas and Balmiki. There are accordingly four House Captains and eight Niwas Prefects. The Prefects along with the Captain of a House represent the honour of that House and its special spirit and character. On them devolves the responsibility of safeguarding its prestige. All the games, sports and extra-curricular activities are organised on the House system, so that the whole identity of a boy is merged in the House to which he belongs.

The particular duties of the Prefects are manifold. They have to see to it that their House or Niwas makes a smart and fine appearance, that beds are made properly and shoes polished, that silence and good order reign in the dining hall. The Prefects report to the Principal every morning before breakfast about attendance at P.T., while the House Captains report every evening before dinner about the attendance in the afternoon sports and games. They are responsible for bringing to the notice of the Principal any breach of discipline. The Class Monitors are similarly responsible for the discipline and polite conduct of their fellow students within the

classrooms. They are in constant contact with the Headmaster and the Principal.

The Headboy tops the system of students' self-rule. He is the pride of the institution. Prefects, House Captains and Monitors are responsible to him, and he, in turn to them all and to the Principal. He enjoys the full confidence of the Principal and the staff, and is treated with distinguished decency by everyone.

Prefects, House Captains and Monitors are elected by the students, subject to the approval of the Principal. The Headboy is nominated by the Principal.

(vi) *St. Xavier's High School, Bombay* :—This school has adopted a rather unusual and elaborate system of student government. It has a large enrolment of nearly 2,000 boys, which perhaps necessitates such a system.

There is first of all the Special Squad, consisting of some twenty-five very reliable boys chosen from the top two classes. They constitute the highest authority in the school's self-government system. Among their major responsibilities are: (1) giving the right lead to the student body in cases of emergency and in tense situations like strikes and other demonstrations; (2) advising the management on major disputes, if they should arise, between the management and the students; (3) collecting funds for various students' needs; (4) giving general assistance in the maintenance of discipline, e.g. detecting truancy, unhygienic acts, immoral transgression, and violation of school rules; (5) suggesting the organisation of cinema shows, fetes, socials, etc.; and (6) supervising and assisting in the work of other student officers.

Then there is the School Council, also consisting of about twenty-five boys chosen for their high sense of justice and responsibility. They take turns, in groups of five, to sit in the Council Room every afternoon during the lunch recess hearing minor complaints from pupils, settling quarrels, and imposing suitable punishments on the offenders. The Council maintains a brief record of every case attended to by it.

Every class has four Monitors, two for preserving the order and the discipline of the class in the absence of the teacher, a third for recording class attendance and checking late-coming, and a fourth for seeing that the class is kept clean. The Monitors are duly elected by the boys, except in those classes where the house system has been introduced for the purpose of competition. In these cases, the two Monitors for discipline, who will also be Captains of the two Houses in the class, become Monitors by virtue of their general

performance in terms of scholastic achievements and conduct. They change every month, when the marks for the period are reckoned. As Captains, they are also expected to check on the regularity of their fellow House members, urge them to work, and help them appropriately, if necessary.

Finally, there are Prefects for maintaining discipline outside the classrooms. There are corridor prefects to see that the boys move in a disciplined manner in the corridors during the breaks. There are staircase prefects to help boys to go up and down the staircase in an orderly fashion. And then there are "Safety-first" prefects who have a number of specified duties, the chief among which are (i) to see that boys do not play in the rain; (ii) to detect boys that play marbles only to win, by fair means or foul; (iii) to prevent boys from buying sweets or food from unauthorised vendors outside the school; and (iv) to enforce the silence zones in the school. About fifty boys (i.e. approximately 2% of the total number of boys in the school) are picked for this work.

(vii) *Jamia Secondary School, Jamia Nagar, Delhi* :—The Students' Council in this school is known as the *Majlis Talba*. It functions under the presidentship of the Principal and consists of the following office-bearers who are all elected: Vice-President, General Secretary, Secretary for Games, Secretary of the Library Board, Secretary of the Editorial Board, and House Monitor. The *Majlis* forms rules for the conduct of its members. It arranges all the activities of the students, and is helped in this task by small committees, such as the Games Committee, the Library Board and the Editorial Board. It meets regularly once a week to discuss the affairs of the school. It brings out a magazine in Urdu and Hindi and a wall paper that is liberally illustrated. From time to time it organises work projects to raise funds for its use. Students doing craftwork have contributed as much as half their earnings to meet some unforeseen or desired expenditure. The *Majlis* is often invited to participate in the organisation of the Jamia functions.

School Parliament

A variant of a students' council is a school parliament. The M.B. Girls' Higher Secondary School, New Delhi, has such a parliament. It has three parties known as *Jagriti Dal*, *Swatantra Dal* and *Pragati Dal*. Regular elections are held, and the party gaining the largest number of votes comes into power. The party forms a Cabinet consisting of four ministers, each in charge of a portfolio.

There is a Ministry of Information which does the work of keeping the student body informed of domestic and foreign news through talks, lectures, a wall newspaper, and magazines in English,

Hindi and Bengali. The officers in this Ministry are elected by the pupils. The Debating Society functions under this Ministry. A member of the staff advises and guides the officers of this Ministry.

The Ministry of Recreation and Entertainment looks after the Dramatic Society and the Music Club. The office bearers for these two societies are elected by the pupils.

The third Ministry is the Ministry of Health. The Minister and the Secretary appoint Health Inspectors for the various classes. Their duties are to inspect the classrooms and corridors daily, to report cases of illness and also children with bad teeth, sore eyes and skin troubles to the school doctor, and to render first aid in emergencies. The Junior Red Cross Society works in cooperation with this Ministry. The Domestic Science teachers act as advisers and guides to the officers of this Ministry.

The fourth Ministry, the Ministry of Discipline, works with the help of the nineteen class Monitors elected by the pupils of each class. Rules are framed regarding punctuality, cleanliness, good manners, courteous behaviour, honesty etc., and all efforts are made to carry them out in the class and on the playground. Offenders are brought to the notice of the Discipline Committee, and are appropriately dealt with in consultation with the staff adviser who guides the activities of the Committee.

Students' Day

The practice of handing over the school to the students for a day to be run entirely by themselves has been reported by three institutions. In the New Era School, Bombay, "the students run the entire school, doing all the work from that of the Principal to that of peons". In the Lal Bagh Higher Secondary School, Lucknow, "the students take complete charge of every activity for the day including the teaching of the classes". In the Jamia Secondary School, Jamia Nagar, Delhi, the *Majlis Talba* or Students' Council manages the entire school for a day. "The teachers are sent on a picnic on this day. The best boy in each subject is selected by the Majlis and asked to teach that subject".

Disciplinary Measures

Whereas some schools feel that they can do without any system of punishments and rewards, others feel that there is need for some sort of system to take notice of failures and achievements as well as slackness and effort. The views of a few schools in this regard together with the systems in operation therein are reported below :—

- (i) *Banasthali Vidyapith* :—"For a healthy society it is of great importance that citizens perform their duty irrespective of what

others are doing. This habit should be developed in students by organising the social life of the school on the above principle. The Banasthali Vidyapith, therefore, has no system of awarding any prizes or giving any punishment. It is impressed upon the students that the prize for doing one's duty conscientiously lies in the doing of the duty itself. No additional prize should be expected for a duty well-performed, and non-performance of duty by one should not encourage another to a similar non-performance."

(ii) *The Doon School, Dehra Dun* :—"Discipline is the resultant of a controlled environment, tradition, and healthy channels for the expression of a boy's spirit of adventure, and not of an elaborate code of punishment, or of mere precept or instruction. A boy learns to be punctual, to bring the right books to school, to do the work set, and to be truthful, when no lapse from these is allowed to pass unnoticed. Masters put on record every such lapse, and the boy who is a frequent defaulter, is seen by the Headmaster during the 'break', and talked to, until he learns to cooperate. Like the truant crow of the fable who learnt to work because nobody else was free to play with him, a lazy boy soon feels bored and out of favour in an environment where everyone is rushing to be in time for work.

'Public opinion', or tradition, is another disciplinary factor. A boy will not disfigure a wall, tear a library book, destroy public property, sneak, or be mean about a thing, because tradition has been built through years that these are ungentlemanly things. School Prefects and Senior Boys are guardians of this tradition. Life in the Houses also greatly contributes to the correct values as to what is honourable and what is not.

Occasional cases of indiscipline do occur, but when they do, the approach is to convince the boy that his ways are wrong, and to help him form the correct habit, rather than to punish him. In matters concerning relapses in behaviour he is put on a 'yellow card', which withdraws from him certain privileges which other boys enjoy; and if a boy is not industrious enough he is put on a 'red card', which only means that he should daily obtain from his teachers a report on his work and satisfy the Headmaster that for a clear week his work has been reported satisfactory.

In very rare cases when boys fail to understand their faults and to improve their ways, and continue to ignore the corrective methods employed by the school, their parents are advised to withdraw them. Often the fear of being sent away from school has a very significant effect, and the otherwise difficult boy promises to show improvement so that he can stay on in a school where he has enjoyed great freedom, friendship, and a variety of activities. But if he doesn't, he is sent

home for good, to make room for somebody else who is more willing to make a better use of his stay in the school".

(iii) *Rajkumar College, Raipur* :—Two schools, the Rajkumar College at Raipur and the Scindia School at Gwalior, have reported on the system of 'Stars and Stripes' in operation there. Although there are differences in the detailed working of the system in the two schools, essentially they are the same. An account of the system in use at the Rajkumar College is given below :—

The school divided into Sets (or Houses), and the chief individual awards recognised at present are judged on the basis of stars and stripes gained. These are recorded set-wise on the set boards.

A boy is judged from four different angles, namely, work, games, conduct and personal hygiene. For any improvement shown by a boy, he is awarded a star, and for any deterioration he gets a stripe. Smaller boys are given a sufficient number of warnings before they are given a stripe. Half stars and half stripes are also awarded. In awarding a star or a stripe a boy is weighed against his own standard. He doesn't have to compete with his class-fellows. For example, the best boy of a class getting about 70% marks in a test might well qualify for a stripe because the standard expected of him is 80%. On the other hand, a weak boy who has for some time just been keeping himself afloat by getting about 30% marks might get a star if he scores 40% marks.

Each star cancels a stripe, and vice-versa. When a boy has 15 uncancelled stars to his credit, he gets a 15 star prize. These prizes are usually books. When a boy has collected 10 uncancelled stripes, he is in for trouble and has to meet the Principal who will mete out appropriate punishment. When a boy collects half a dozen stripes he starts feeling the ill-effects of his lapses, as he may have to sit and read his books when his friends are enjoying a cinema show or some other entertaining programme. The vast majority of boys who have collected half a dozen stripes begin to take a serious view of the situation and try to get some stars by improving their academic work, or achieving an extra fine standard in hygiene, or showing an exceptional enthusiasm in their games, or doing some good turn. It is very rarely that a boy gets 10 stripes, and the administration of corporal punishment is rarer still. One boy in a year, or at the most two, may have to see the Principal on this account.

Group System

The American concept of the 'homeroom' has been accepted, with modifications, by some of our schools. The Workshoppers'

Seminar which discussed the organisation of homeroom groups was of the opinion that the purpose of the homeroom is "to enable the teacher to come into closer contact with the pupils".¹ The main activities of the homeroom centre round guidance and counselling, and personal interviews and home visits are expected to serve this end. Homeroom groups may also form units for co-curricular activities and games. According to the Workshoppers, it is necessary to reserve definite periods for the homeroom meetings. Such a period may come at the beginning of the school day and may consist of only fifteen minutes. They also suggested that the general assembly of the school may be held twice in the week and on the remaining days, the assembly period may be utilised for homeroom activities. The general practice in American schools, however, is to have a daily period.

Two schools have reported the adoption of the 'Group' system and their reports are reproduced below :—

(i) *Vidya Bhawan, Udaipur* :—The whole school is divided into a dozen groups of 20 to 25 students each. A group is under the charge of a senior master and an assistant. The groupmaster studies the personality of each individual child and helps in his development. He also keeps a detailed record of his progress in studies, health and general development and sends periodical reports of the same to his parents. The groupmaster keeps contact with the home through personal visits and correspondence, and in cases of maladjustment he tries to bring about a better understanding. The group is like a family within the larger school community and has a pretty full community life of its own. It arranges camps, hikes, socials and recreational and athletic activities. It is a well known sociological finding that a community to be a real community must be small and must be based on personal relationships. The group serves well as a community. Each group celebrates an annual function, the programme of which consists of dramatics, music, dancing, speeches, recitations, etc.

The group system enables a close contact between pupils and teachers, and the guidance that the groupmaster gives to the adolescent boys has proved to be of immense value to them. The boys develop loyalties which are deep-seated and which are later transferred to the society and the State. Towards the end of the school course the groupmaster discusses with the boys the careers which they could take up. Thus the group system makes individual attention and true community life possible at school.

1. *Self-Reform in Schools* : A Report by Working Educators, p. 62, Ministry of Education, Government of India, 1955.

(ii) *Banasthali Vidyapith*—Every class or a group of classes is put in charge of a teacher. The duty of the group teacher is to watch and guide the development of every individual student of his group. For this purpose the teacher has to remain in touch with other teachers, with the hostel superintendent if the student is a hosteller, and with the students' guardians. This system makes it possible to fix the overall responsibility for a student on one teacher who looks after her all-round development. Each group has its own meetings, trips and excursions. These trips and excursions provide a valuable opportunity to the teacher to observe, understand and appreciate his wards. They are helpful to him in planning the individual development of each student's personality.

Parent-Teacher Relationship

The only contact that most parents have with the teachers of their children is a more or less casual meeting on the occasion of the Parents' Day or the School Foundation Day. Some parents may get to be fairly well known to the Principal, but the acquaintance of even these few with their children's teachers is at best superficial. In many cases, it is true that parents have no time to meet teachers; but the schools are equally to blame, if not more, for the general inadequacy of parent-teacher relationships. In recent years, with the organisation of P.T.A.'s in some schools, the situation has improved somewhat; nevertheless, there is still considerable room for improvement.

The experiment that has only recently been started in the Delhi Public School should have both interest and value to other schools, particularly to large-sized schools. The Principal of the school writes as follows :

"Usually, parents' days are observed in every institution on a rather large scale, and it is not possible for parents to obtain a close insight either into the working of the institution or the progress of their wards. The teaching conditions are also not fully understood and appreciated. Nor do these casual meetings give the teachers an opportunity of establishing an adequately close and personal contact with the parents with a view to assessing the home conditions of the children in which they live and work."

In order to place this business on a sounder footing we have been holding parents' days for individual classes on every Saturday. Parents of children reading in a particular standard are invited. They come to the school for two hours or more. The programme consists of (i) regular classes which parents may watch; (ii) light refreshments and individual discussions with teachers about the children; and (iii) a formal meeting of parents and teachers. A

large number of parents have shown considerable interest in our teaching conditions and have actually attended classes in different subjects with their children. To start with, our teachers were rather apprehensive of any good results out of this part of the scheme. They are now very happy because the parents are not unduly critical. On the other hand, they are appreciative of the teaching methods and it appears that they have obtained a closer insight into our working conditions. Both the equipment used and the response on the part of children are normal and not stage-managed for such an occasion. Indirectly, it also enthuses the teachers to give of their best on a public occasion of this kind. In other words, instead of waiting for any guidance from outside quarters the teachers are likely, under this scheme, to set up their own high standards.

The three quarters of an hour spent socially over a cup of tea has promoted that atmosphere of good feeling between parents and teachers which we did not find so much in evidence before. Our usual experience was that when a parent called on a teacher during school hours, either the teacher was not fully free or the parent was himself in a hurry. Hurried meetings produced no useful results; in fact they often led to undesirable misunderstandings arising out of a failure to appreciate mutual difficulties and viewpoints. We find that a cup of tea has made all the difference in promoting good understanding.

The third part of the programme relating to a formal meeting, in which parents can express their viewpoints and difficulties, if any, and the Principal and members of the staff can explain their viewpoints relating to the points raised, has also proved beneficial. It gives the parents an opportunity to throw valuable sidelights on education as viewed by the non-professional. Undoubtedly, we have received some valuable suggestions which we can easily put into practice to the satisfaction of the parent community. On the other hand, our explanations in regard to other points have convinced the parents of the reasonableness of our present practice.

The total result of these intimate parent-teacher meetings will be highly beneficial to all concerned. Living in a place like Delhi, where distances are large and where pupils in a large school like ours are drawn from very scattered areas, it is not easy to establish a parent-teacher association of the type in which the community takes a very intimate interest in the needs and requirements of the school and is prepared to lend its hand. Still, our experience gives an indication that we might successfully achieve this aim to a certain extent by repeating these meetings three or four times in the case of every standard."

In-service Growth of Teachers

Speaking of the in-service training of teachers, the Secondary Education Commission says : "However excellent the programme of teacher training may be, it does not by itself produce an excellent teacher. It can only engender the knowledge, skills and attitudes which will enable the teacher to begin his task with a reasonable degree of confidence and with the minimum amount of experience. Increased efficiency will come through experience critically analysed and through individual and group efforts at improvement."¹

It is not sufficiently realised that the schools, themselves have a responsibility to shoulder in this matter of in-service training. The experiments reported below should encourage our schools to greater effort in this direction.

(i) *Maharani Gayatri Devi Girls' Public School, Jaipur* :—The teachers are encouraged to make a good use of the staff library. They keep notes of interesting and useful ideas which they come across in their reading, and occasionally discuss these with the Principal. The staff meets every Thursday for a conference, and the minutes of these meetings are recorded in turn by different teachers.

(ii) *Providence Girls' High School, Nagpur* :—The good teachers of the school are requested to give discussion lessons by rotation for the benefit of younger, less experienced or untrained teachers. There is a regular programme of such lessons. It has been found beneficial even to trained and experienced teachers who can always learn from one another and who are kept alert and up-to-date.

(iii) *Rajkumar College, Raipur* :—Once a week the Principal meets the staff for one period. He either meets all of them together or he meets them departmentwise. In addition to this, he visits the classes of his teachers, and observes about 20 lessons a month, mainly of the junior teachers. Suggestions for improvement are offered in a private interview.

One of the recommendations made in the Report of the Hyderabad Secondary Education Workshop for improving the quality of instruction relates to the supervisory role of the headmaster. It runs as follows : "Generally, the headmaster's visit should be scheduled at the request of the teacher. His supervision rounds should be helpful to the teachers and the pupils and should eliminate fear from those he comes in contact with. All necessary instructions should be given individually and, if necessary, privately ; but if such instruction or guidance is useful to the rest of the staff, the headmaster should give it in the staff meetings without pointing out the drawback of any particular teacher."

1. *Op. cit.*, p. 169.

CHAPTER II

SCHOOL ORGANISATION AND METHODS OF TEACHING

This chapter contains reports of experiments in two related fields, namely, methods of teaching and school organisation. The Secondary Education Commission has made a vigorous plea for dynamic methods of teaching and has stressed the need for the teacher "to adopt his methods of work and presentation to the psychological needs and mental range of different types of children."¹ It has not, however, adequately emphasised the close relationship between methods and organisation. Teachers can be dynamic and creative only if the organisation is flexible enough to allow the measure of freedom that creativity requires. "Teaching cannot be mere mechanical routine ; it must release and use creative forces in the teacher. That can happen only if the teacher is master in his own house, if he enjoys an adequate measure of freedom and autonomy. He must not be rigidly bound by syllabuses and rules and regulations, but must be free to work out his own syllabus within a broad framework and develop his own methods."² The function of school organisation is to provide just this 'broad framework'. Unfortunately, some state directorates of education impose such restrictions on the schools that they are left with hardly any freedom for experimentation. The following statements made by two school principals bear this out. One of them writes : "In our state, no scope whatever is given for our schools to conduct any experiments. The Education Department dictates every little detail to the Principal, e.g. the exact amount of time to be given to each subject, the number of copybooks to be used, the particular textbooks to be used, even the instrument of writing to be used. Hence, the only time when we can conduct experiments is vacation time". Another school Principal writes even more strongly : "The utter unpredictability of the state educational authorities is a powerful discouragement from trying to do anything more than to guess what their next move will be".

Organisation in Stages

"Shreyas" in Ahmedabad, has been recognised by the Government of Bombay as a special Secondary school. The school is divided into sections and stages as follows :—

Infant Section : Age level—2 plus to 5 plus

1. *Op. cit.*, p. 108.

2. *Teachers and Curricula in Secondary Schools*. Report of a Study by an International Team, The Ford Foundation, New Delhi, 1954.

Junior Section : Age level—6 plus to 11 plus

Stage I : Age level : 6 plus to 8 plus

Stage II : Age level : 9 plus to 11 plus

Senior Section : Age level—12 plus upwards

Stage III : Age level : 12 plus to 14 plus

Stage IV : Age level : 15 plus to 16 plus

The scheme is meant to fit each child's individual needs. The object is not conforming to rigid standards to encourage a hurried and short span of school life for a bright or quick-to-learn student. On the contrary, such a child is given a wider and deeper scope of work and is saved from the social and emotional maladjustment of students prematurely rushed to college.

In the Junior Section, the children are mostly with their group teachers, and unconsciously absorb a wide general knowledge from their experience of the environment specially created for the purpose. They have a free recourse to the subject teachers and the amply equipped subject rooms. No subject is compulsory, but the children are provided with full opportunity and encouragement to develop their vocabulary and to acquire a basic knowledge of Geometry, Algebra, Biology, Hindi, Sanskrit and English over and above the subjects more commonly taught. Each student has scope to develop himself in each subject according to his capacity and aptitude. For example, a pupil who has a special aptitude for Mathematics is free to go further and deeper into the subject. On the other hand, because a child is backward in some subject, he is not therefore prevented from going ahead with the subject at which he is particularly strong. Instead, he receives individual attention in his weak subject and is encouraged to come up to the general level without being forced in his pace.

In the Senior Section, the students go to the specialist teachers in their subject rooms, but they remain under the general supervision of their group teachers. Relatively speaking, that is, compared with the common practice, up to the age of 14 their classroom appointments with their teachers are few, greater importance being attached to what they can explore for themselves by independent thinking and discovery. Starting from an acquaintance with all the subjects, the students are encouraged to discover their special aptitudes and interests by the age of 14 plus. They are thus able, whether they are going in for an examination or not, to devote the best years of their school life to their special subjects. The varied curricular offerings and other facilities provided by the school prepare the pupils for what is going to be their main line of interest or vocation when they grow up.

At "Shreyas", the child is the focus of interest, and the task of the teachers is to help him grow to his fullest stature. The syllabus is not followed at the cost of the child; on the contrary, it is frequently adjusted to suit his needs. The time-table is framed bearing in mind the requirements of each individual student. Stress is laid on the freedom to adjust, for once the individual's difficulties are cured, he emerges from them, in his own good time, a cooperative and responsible being, in harmony and not at strife with the social and cultural patterns of his surroundings.

What has been the success of this experiment? I should let the school authorities speak for themselves. This is what they have to report: "We have had fuller experience in respect of children below the 11 plus age level; hence, for these groups we find ourselves in a better position to lay down a tentative syllabus. Some of this has already received a trial, and encouraged by this beginning, we wish to explore further possibilities. In the children we have found a lively eagerness to respond to a new approach, but among the teachers such qualities are, unfortunately, less common; trained, as they have been, in the old school of thought, we tend to experience some difficulty in getting them to adopt new ways of thinking and working. "Shreyas", however, has been fortunate enough to secure a few teachers who are making honest efforts to work out more enlightened and progressive means to education.... In the Senior Section, our object of making the studies fit the individual has been somewhat limited by the fact that most parents (and consequently children) have desired an authorised school leaving examination as their goal. The S.S.C. Board gives a wide range of subjects for the pupils' choice, and yet it is unfortunate that the University gives admission only to students who have passed in particular subjects. The value of other subjects, the importance of their study and the choice of vocation are completely ignored by society, by most parents, and consequently by pupils. With these limitations we find ourselves following a curriculum and syllabuses which lead to the S.S.C. examination. The prescribed syllabuses form the skeleton of the plan of work for our Senior Section (stages III-IV, age level 12 plus upwards). Yet while there is little difference in the courses followed by us, our approach and treatment are motivated by the idea of helping the child. There we have been successful, and even children who would have left school for good, who had no love for work, and who would have proved unfit to take up a vocation of any kind, have been taught at "Shreyas" to concentrate upon and develop a liking for the tasks laid before them."

Day Boarding

A number of schools have experimented with the system of day

boarding. The aim is to provide, as far as possible, the advantages of residential education to students who cannot stay in the school hostel. The day boarders lunch and rest in the school itself. They come in the morning after breakfast and leave late in the afternoon after games. For example, at the Vidya Bhawan, Udaipur, the day scholars remain at school from eight in the morning until sunset. The following is the usual daily programme at "Shreyas" which is adjustable to the needs of the season :—

8-15 or 9 a.m. to 12 noon	.. Study hours
12 noon to 2 p.m.	.. Meals, rest and wash
2 p.m. to 4-15 p.m.	.. Self study and preparation, and other activities
4-15 p.m.	.. Milk and snacks
.....till 5-30 p.m.	.. Swimming, games, sports

The children can stay on longer in the evenings, if it suits them, and may engage themselves in hobbies, dramatics, talks and other activities of the boarders.

The Secondary Education Commission has recommended the establishment of 'residential day schools' to provide greater opportunities for teacher-pupil contact and for developing recreational and extra-curricular activities. Schools situated in areas with a large industrial population where the sanitation is usually poor and where there is little or no place for children to play or work should try to convert themselves into day boarding schools.

Midday Meal

The Secondary Education Commission maintains that one of the important factors leading to defective health is malnutrition. "At no period in life," according to the Commission, "does malnutrition play such a large part in causing ill-health, or in promoting defects of growth as in the period of adolescence". It then goes on to recommend that "a proper nutritional standard should be maintained in hostels and residential schools".¹ The Commission has shrewdly avoided making any recommendation about midday meals in day schools, realising, perhaps, that the provision of such meals would be the responsibility of the State, which responsibility it is not in a position at the moment to shoulder. There are, however, some schools in the country, besides those that have day boarding arrangements, where an attempt has been made to provide a midday lunch. For example, at Jeevan Bharati in Surat a midday lunch is provided for every pupil on a monthly payment of two rupees.

1. *Op. cit.*, pp. 141-42.

The children all lunch together, serving themselves and cleaning their own plates.

What could schools do to provide free lunches, not to all their pupils, but at least to those whose parents cannot afford to pay for them? The Hyderabad Secondary Education Workshop which considered this problem has made the following recommendations to schools for finding the necessary funds for this purpose :—
 (i) Donations may be collected from the community ; (ii) variety entertainment programmes may be held from time to time ; (iii) grain may be collected from big landlords in the villages at the time of harvesting ; (iv) a school canteen may be run and a percentage of the profits may be set aside for providing lunch for poor students ; (v) voluntary contributions of fruits, sweets, etc., may be invited from well-to-do children.

Continuation Classes

After the Middle school stage, while some students join High school (or Higher Secondary School) classes, a large number drop out to take up a trade or an apprenticeship or in some way to earn a livelihood. Many of them do so because they find that they are not suited for academic studies or because they do not have the means to pursue the full Secondary school course. Following the recommendations of the Narendra Deo Committee, the Government of Uttar Pradesh has started continuation classes in a number of government and non-government schools. These classes are held in the evenings after the regular school hours. This scheme has enabled a large number of adolescents to keep up their interest in education and at the same time to obtain a specialised knowledge of the trade or profession that they have either joined or are intending to join. General Knowledge and Hindi are compulsory subjects in these classes, in addition to which the students have to select two crafts or trades out of some fifteen to twenty options. There are two types of courses available, one of six months' duration, and the other of two years' duration. The latter is meant for a specialised training in crafts.

The scheme has proved quite successful and could very well be tried out by other states. Individual schools, too, if they are interested in continuation education, could make an experiment in this direction.

Open Shelf Library

The library is the intellectual nerve centre of a good school, the hub of its academic life, inspiring students to read and cultivating in them a sincere love of books. All progressive methods of edu-

tion postulate the existence of a well-stocked, efficiently organised and easily accessible library. There are, however, hundreds of schools in this country which, although they possess well-stocked libraries, are afraid to leave their book-shelves open. The Secondary Education Commission has recommended the open shelf system to enable students to have free access to books, to learn to handle them and to browse at their leisure. One school—the Madras Christian College School—has reported its experiment of switching over from the closed shelf to the open shelf system, and this report is reproduced here for the benefit of other schools that might profit from this experience.

"Until four years ago, the school library books were kept in closed shelves, and so, many of the good books remained untouched. There was a general fear that it would be unsafe to leave the shelves open. On the other hand, it was felt that it was essential that the students should be given a freer access to the library to enable them to consult books before borrowing them. So, four years ago the library was converted into an open access library. This has made it possible for the class teachers to refer the boys to reference and other books which they can look up during the class library periods or at other times. It was now found necessary for the efficient working of the library to get the services of pupil librarians who could, in turns, take on the duties of issuing and receiving books and also dusting the shelves. Our experience of four years is that students can be trusted and that a system based on responsibility and trust is, in the long run, more efficient and less expensive."

Systematic Use of Audio-visual Aids

A great deal is said these days of the value of audio-visual aids. Educational interest in these aids has been aroused by the overwhelming evidence of their power to inform, to change individual and group behaviour, and to influence the development of attitudes and opinions. And yet, our schools have been very slow indeed in developing programmes of instruction which can make an effective use of available audio-visual materials.

Two schools—St. Xavier's High School and St. Stanislaus High School, both from Bombay—have reported experiments with regular weekly periods of 'visual instruction'. As their programmes are somewhat similar, only one of the reports—that of St. Xavier's High School—need be presented here. The school has appointed a special teacher to attend to the correlation between the school syllabus and the audio-visual aids which are available in the school library and also those which can be easily secured from other local agencies. The school has a number of projects for showing 16 mm and

8 mm films, filmstrips, slides of different sizes, and viewmaster reels. It has a complete set of the latter, numbering over 300. A special room has been set aside for all these aids and is in charge of a special person who assists the teachers in locating any chart, picture, filmstrip or other material they may need. This arrangement encourages teachers to make a liberal use of audio-visual materials in their regular classroom teaching. Moreover, every class has a special period a week of visual instruction which may take the form of an educational film or a talk illustrated with the help of a filmstrip, slides or viewmaster reels or by means of opaque projection. The programme is fixed by the teachers who take the period in rotation.

School Assemblies

Assembly programmes should provide learning situations of potentially rich significance in the Secondary school. Whether they are used for announcements and routine activities or for more important educational purposes depends on their organisation and nature in individual schools. Some of the accepted purposes of school assemblies taken from the reports submitted by various schools are (i) to create (through prayer and music) a spirit of reverence for God whose creatures we are ; (ii) to create (again through prayer and music) an atmosphere which imparts peace and mental poise to the pupils ; (iii) to foster broad human sympathies and a spirit of world brotherhood (through talks, news reading and active efforts for the alleviation of human suffering) ; (iv) to develop a spirit of tolerance for the ideas and the religious belief of others ; (v) to encourage self-expression (through elocution, dramatisation, singing and other activities) ; (vi) to develop an *esprit de corps* among pupils and teachers and to foster in them a sense of loyalty to the lofty traditions of the school.

Reports of assemblies received from five different schools are presented here. All of them save one are rather brief reports.

(i) *Mayo College, Ajmer* :—“The mainstay of moral inspiration is the college assembly where there are non-sectional prayers and the ideals of community service are kept always in the foreground.” The college has its own compilation of assembly prayers and songs.

(ii) *Jeevan Bharati, Surat* :—“The school has a morning assembly every day, and the whole programme is arranged by the pupil secretary with the assistance of teachers. The programme includes a prayer, news-reading, music and a short speech by a teacher or a pupil.”

(iii) *Vasanta College for Women, Banaras* :—“We wish to create in our students a spirit of tolerance for the thoughts, ideas and

religion of others. So in our morning assembly we read out passages from teachers and writers on Buddhism, Islam, Hinduism and Christianity and from the writings of Besant, Tagore and others. Sometimes the passages are read by the teachers, and sometimes they are chosen and read by the students. Once a week the news of the week is summarised and presented by the students."

(iv) *Boys' Town, Nasik* :—"The daily assembly forms an integral part of education at Boys' Town. Talks are given in the assembly, alternately by boys and teachers, on a variety of subjects, such as important happenings in India and abroad and biographies of outstanding personalities, men of letters and scientists. The idea behind these talks is to bring the world within the orbit of the children and to acquaint them with the lives and achievements of the architects and builders of the world."

(v) *New Era High School, Bombay* :—This school has an elaborate organisation for the morning assembly, and some days of the week are reserved for special types of assemblies. The assembly begins with the school prayer which is followed by music. This is usually a simple *bhajan* expressing some noble thought or idea. Then follows a short talk by the Principal or one of the teachers or some invited guest or the Chairman of the Leaders' Council or a pupil. The assembly ends with the singing of the national anthem. To help the students to derive the greatest possible benefit from the talks given by distinguished visitors, the school has established the practice of having the talks recorded and reported by two students who sit in the "press reporters' lobby". Moreover, each talk is followed by questions put by the students, many of which have been carefully prepared and submitted to the speaker in advance. Finally, a few questions on the various talks that have been given are included in the paper on General Knowledge. This has the effect of getting the students to listen attentively to the speakers.

On Tuesdays, the student news-editors read out important news of the week. The local news is given in Gujarati, the world news in Hindi and sports news in English. To give different students a training in the selection, editing and narration of news, the editors are changed from time to time.

The Wednesday Assembly is a students' assembly. It is conducted entirely by the students and presided over by the Chairman of the Leaders' Council. It is conducted classwise, each division of the senior classes taking it in rotation according to a fixed schedule. The programme includes choral and instrumental music and recitations.

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Friday is observed as a day of remembrance of Mahatma Gandhi, and the assembly on this day is a solemn and dignified affair. Prayers from different religions are recited by pupils professing these religions. This is followed by a song embodying some great idea like *ahimsa* preached by Gandhiji. Then comes a talk on some noble thought of his or the reading of a passage from his writings. At the end of the assembly the students make a voluntary contribution from their pocket money towards the Mahatma Gandhi Fund which is used for helping the needy and distressed. At the time of a calamity like a flood or a famine a special appeal is made for a more liberal contribution. "Gandhiji's ideal of love for humanity is being put into practice through the Friday assembly. The pupils feel that they should try to be useful in their own humble way to their poor and needy brethren living far away from them."

At the Saturday assembly there is a programme of community singing. The school has its own booklet of songs. Many of these songs are intended to instil in the students a love of the motherland and a sense of international fellowship.

Besides the daily morning assembly, the school has built up a tradition according to which every class is required to give one assembly programme in the year. The last two periods in the timetable for Thursday are reserved for this class assembly programme. It usually consists of such items as, dramatisation, recitations, tableaus and dances. Most of the items presented are related to the students' classwork. Improvisation is the dominant characteristic of these programmes. The students compose their own plays, poems and dances and make their own stage properties and costumes. Of course, they can have the help and guidance of their teachers wherever required, both in the preparation and execution of the programme. The class assembly programme really becomes a class project embodying the educational principle of 'learning by doing'. It develops the qualities of self-confidence, initiative, and leadership, and promotes the spirit of cooperation. Above all, it provides every child in the school an opportunity for self-expression in speech, song, dance or craftwork and for participation in a cooperative group activity.

Open-Air Session

This is an experiment which was started at the Vidya Bhavan, Udaipur, and which has been adopted by a number of institutions in Rajasthan. It is a camp session of the entire school lasting 12 to 15 days. It is not just an educational tour or a school journey but a regular school session.

The value of outdoor work and of study from life has long

been recognised in the field of education. By living a corporate life in a new environment, students are helped not only to develop new interests but also to resolve some of their individual difficulties. Students who have made little or no headway in their studies are often able to make a fresh start and return to their day to day work with freshness and renewed interest. As they come into contact with different people and pass through new situations the boys learn to adjust themselves to new social patterns.

The venue of the open-air session is selected for its natural beauty and its scope for educational work. An advance party of teachers goes to different places to select a suitable spot. Some of the places where open-air sessions have been held are Jai Samad, a large lake nestled among the Aravalli Hills, the Zawar Mines where the richest deposit of lead in India is found, Mt. Abu with its famous Jain temples, Ajmer with its railway workshops and its historical associations, and the great fort of Mandu renowned in mediaeval history.

As soon as a spot has been selected a staff meeting is held to draw up a plan of work for the session which largely consists of a programme of observational studies and practical work. In this meeting it is also decided what different *shrenis* or study groups are going to be formed. Students are grouped according to their predominant interests. The choice of subjects depends on the place where the open-air session is held. If it is a place of cultural importance, e.g. a place of pilgrimage, an ancient capital or a fort, the study of art, literature, and history get prominence. If it is a spot of geographical importance, e.g. a lake or a mine, the study of geographical and socio-economic factors is specially emphasised. If it is an industrial centre, an elementary study of industrial processes, of labour problems and of factory organisation is taken up.

Some features of camp life deserve to be mentioned. In the morning, after the inspection of the tents and the kit of the students, there is a brief period of physical training which is followed by a morning assembly in which, after a chorus, a talk is delivered by one of the teachers or by some guest. Very often the inspiration for this talk comes from the beauty or the historical and cultural associations of the camp site.

The time between 9 and 11.30 is devoted to studies. Then there is a midday break for bath, meals and rest. In the afternoon again there is *shreni* work or study for about two hours, which may consist of observational or practical work at the camp site. In the evening there are games and outings. Sometimes a whole afternoon or a whole day is devoted to excursions for collecting data or making geographical, historical or scientific observations.

About sunset there is the "silence hour." The campers go and sit for about fifteen minutes in complete silence at a place selected before hand to watch the beauty of the sunset. Soft music is played, first at the beginning and then again just when the sun is going down below the horizon. Then the campers disperse in silence. Later in the evening an entertainment programme which may take the form of a *mushaira*, a musical concert or a camp fire is held.

The last day of the session is the Visitors' Day when guests are invited to come and have a look around the camp. An exhibition of the work done during the session is also arranged. Often there is a short programme of dramatics, recitations, music, dancing, etc. to entertain the guests.

In the camp there is a close contact between the teacher and the taught. The teacher gets to know his pupils better and can help them more effectively. The students return home with new experiences and changed attitudes.

Projects

The Report of the Secondary Education Commission contains an extremely useful paragraph on the value of activity methods from which I shall quote just three sentences bearing on projects and unit assignments which are the next two areas of experimentation to be dealt with in this study. "The point of departure for all reforms in method," says the Report, "must be the realisation that knowledge has to be actively acquired by every individual student through independent effort. The basis of teaching must, therefore, be the organisation of the subject-matter into units or projects which would create opportunities for self-activity on the part of the students.... The business of the teacher should be to re-establish the link between life and knowledge, to share the aims and objects of teaching with his pupils and to plan the programme of work in such a way that pupils will have varied and ample opportunities for self-expression in speech, writing, collective reading, independent research, constructive activities and other projects that bring the hand and mind into fruitful cooperation."

Some of the important pupil traits that can be developed through the use of the project method as claimed by schools that have used it fairly extensively, are initiative, responsibility, perseverance, alertness, judgment, and cooperation.

Four schools have reported on the use of projects in their programmes.

1. *Op. cit.* pp. 105-106

(i) *Banasthali Vidyapith* :—Every year the Vidyapith selects some topics of educational significance for an annual project. The selected students are divided into a number of groups, each group to study the subject from a special angle. In this way a great deal of valuable and intensive work is done on the subject. Some of the subjects that have been worked upon by the students in this annual project are: Ashoka; Kabir; Tagore; Rajasthan. The work done by the students engaged in the project is, on completion, exhibited for the benefit of other students.

(ii) *Vidya Bhawan, Udaipur* :—Here too, once a year, the entire school is engaged in what is called the “anniversary project”. For a whole fortnight the bulk of the school time is devoted to work on this project, a characteristic feature of which is that it integrates a number of subjects. A special plan of work with a modified time-table is drawn up for the occasion, and the students are grouped according to their interests. Handwork takes an important place in the project. The theme of the project is generally cultural, often based on the life of a hero or on some epoch in history. Some of the subjects on which projects have been executed are: Ashoka and his Age; Jesus Christ and Christianity; The Age of the Mahabharata; The Gupta Age; and the Indian Renaissance. Some prominent educationist is invited to preside over the anniversary function which is the culmination of the project. At this function, a pageant based on the work of the project is staged.

(iii) *New Era School, Bombay* :—Projects correlating different subjects have been worked out from time to time by an entire department of the School. The themes of some of the projects are: The Needs of Mankind; Those Who Work for Us; The Big World; Conveyance through the Ages; *Diwali*; Christmas; and *Janmasthami*.

(iv) *Government High School, Masulipatam* :—The school has given details of a multiple project which was undertaken in 1951. The purpose of the project was to help pupils understand the story of modern civilisation and how the world of today is the result of development through the ages. The subject was divided into a number of units, each unit constituting a separate project. “Great Discoveries” formed one of these unit projects; but it was in turn broken up into several sub-units, such as, the story of ships and the history of the post office. The project on “Great Discoveries” took eight weeks to complete, with three periods a week devoted to it in school. The work was divided, according to the abilities and interests of the pupils, among seven groups of pupils each in charge of a leader. Each group had to produce some visual materials like

charts and models and these visual aids together with the group reports written up by the participants enabled the groups to share with one another the information collected by each. Smaller editions of the wall charts produced were included in the class magazine. The project aroused great interest, and it revealed that the 48 children who took part in it were prepared to do a great deal of work.

From the four accounts given above, all of which deal with occasional projects, it appears that the project method is neither extensively nor intensively used in our schools. It appears to be used more as a decorative frill than as an essential technique of teaching and a useful way of learning. The Secondary Education Commission has recommended that "the emphasis in teaching should shift from verbalism and memorisation to learning through purposeful, concrete and realistic situations and, for this purpose, the principles of the 'activity method' and the 'project method' should be *assimilated* (italics mine) in school practice." In other words, such methods should form part of the day to day practice of teaching. What is now a widely accepted theory should be converted into practice.

Units of Work

St. Xavier's High School, Bombay, has given the lead to a number of sister institutions in that city by organising the syllabus prescribed for the High school classes into suitable and workable units. For this purpose the scholastic year has been divided into fifteen fortnights, five fortnights being allotted to each of three terms in the year. In addition, a fortnight apiece has been set aside for revision at the beginning and at the end of the session. By breaking up the syllabus into convenient units, the advantage is that guardians and pupils get a better idea of the ground to be covered in each fortnight and that the pupils will be helped in accomplishing the work prescribed within the set time limit. The work of the teacher also is better defined inasmuch as he knows before hand how much of the syllabus has to be covered within a particular period.

An important feature of the scheme of fortnightly units is that both the class-work and the home-work has been clearly set out. This makes it easier to regulate the home-work load that pupils have to carry. Another feature of the scheme is that visual aids like films, filmstrips and charts and other aids to learning such as excursions, debates, and seminars have been suggested to the teachers.

1. *Op. cit.*, p. 117.

Examinations have always proved a nightmare to children of average and sub-average ability. With a whole term's course to prepare for an examination, the average student tends to be unnerved, not knowing what to do and how to prepare himself for the ordeal. This is specially the case if he has not been making a sustained effort from day to day and week to week to keep himself abreast of the progress of the class. As the examination draws nearer, he begins making a frantic, last minute effort to cover the requisite position with the inevitable result that he fails to pass the examination. Under this scheme, every child is required to make a sustained effort to keep pace with the class and to carry through the programme of work scheduled for each fortnight in order to be able to show progress in the periodical tests. Moreover, in a large multi-sectioned school, the uniform progress of each section of a standard is assured. Yet another advantage of this system is that the terminal question papers can be made more representative by requiring that a question be set on each fortnight's unit, thus avoiding the danger of making the papers lopsided with an overemphasis on one portion of the syllabus and the comparative neglect of another. Students making a methodical study on the basis of the prescribed units are not likely to be disappointed with the papers set according to this pattern.

The Dalton Plan

Two schools have reported experiments with the Dalton Plan, but whereas one school has now abandoned the plan, the other is continuing with it, although with some modifications. Their reports are summarised below.

(i) *Jeevan Bharati, Surat* :—The Dalton Plan was tried in the Secondary classes of the school for full four years. The teachers worked with great enthusiasm to make it a success; but the response from the pupils and guardians was poor, and so it had to be abandoned as the school could not carry on an experiment like this incurring losses every year due to a fall in the number of pupils.

When the plan was in operation, the pupils were given one assignment per month in each subject which meant ten assignments for the year. From two to two and a half hours were devoted every day to assignment work, which was expected to be done by the pupils in the subject rooms with the guidance of the subject teachers. The rest of the time was devoted to class teaching and to other individual and group activities, like music, art, physical education, dramatics, etc. Each assignment was divided into twenty units which amounted approximately to one unit per day. The pupils were greatly encouraged to work on the assignments, and complete

records were maintained of their progress. Each subject teacher kept a record of the progress of each pupil, and the pupils too had their own progress registers.

The experiment revealed three types of pupil mentality :—

1. The intelligent pupils liked the method. They worked hard and benefited very much by it.
2. The average pupils were not particularly enthusiastic about the method. As they were required to work regularly, they gradually lost interest in this method.
3. The backward pupils either copied the assignments from their friends or did not work at all. Even if the teacher tried to be strict about their work on the assignments, they were not prepared to put in the required effort.

There were no terminal examinations. The pupils were judged on the basis of their progress on the assignments and were rated as weak, unsatisfactory, fair, satisfactory, good or excellent. There was an annual test, however, but this was meant only for the weak students to give them a chance to save the year by working hard.

As stated already, the experiment had to be abandoned because a large number of backward pupils as well as some average students who were not willing to put in regular work began to leave the school, and the numbers dropped appreciably.

(ii) *Vasanta College, Banaras* :—This school follows the Dalton Plan in the top five classes. A whole month's assignment is given in each subject, and the student is free to plan and complete her work. The responsibility is entirely hers. This method has been adopted to create a sense of responsibility and the habit of co-operative work amongst the students. It has been observed that by this method the students are able to do a lot of general reading on the topics set for individual study. The mere study of textbooks is thus minimised. The teacher is also able to give individual attention to her students according to their capacities and needs. A greater contact is thus possible between the teacher and the taught.

Recently, due to the paucity of good reading materials in Hindi, some modifications have had to be made in the method. Formerly, the assignments were based on English books; but now due to the fall in the standard of English, most of these books cannot be used as they present great difficulties.

Classroom Assignments

The practice of setting aside some small part of the school day for assignments—which is a diluted form of the Dalton Plan—has

been reported by two schools. Such assignments are valuable if their purpose is to make up for inadequacies in discussion, problem solving to group work and if they are made at the right time. They are never successful if they are mechanically conceived and haphazardly applied. A good assignment should motivate substantial units of work. It should arise from an important problem where additional data is needed to go forward with the work, and it should be developed through a preliminary discussion between teacher and students. Finally, it should include alternatives to meet the varying needs and interests and abilities of the class.

(i) *Jeevan Bharati, Surat* :—Two periods are devoted every day for assignments. The assignments are mainly in English, Gujarati, Mathematics and History. Individual guidance is given by the teachers in these periods.

(ii) *Christian High School, Kharar* :—The assignment system was tried in this school for a long time and it was found most useful. But when the numbers in each class rose to about 50 or so, it could not be used successfully.

The assignments are made by the subject teachers in the periods allotted for the subjects. The students are encouraged to consult reference and other books, and while they are at work the teacher goes about supervising their work and giving guidance wherever required.

Supervised Reading

It is well known that cramming forms the most important part of the work of students in the Secondary school. Almost the whole of their energy is spent in memorising facts from their textbooks and reproducing them in their examination scripts. The result is that soon after the examination is over, the mental equipment of students falls sharply and reaches a very low level. Various remedies have been suggested for remedying this defect including the employment of better teaching methods and a reform of the examination system. One school—the Jalpaiguri Zila School—has experimented with a system of supervised reading, and an account of this experiment is given below.

"It was felt that it should be possible so to organise the school work that students are encouraged to read as many books as possible besides the prescribed or selected texts and also to express the ideas thus gathered in language of their own. The Jalpaiguri Zila School is a school of 300 students with a general library and eight separate class libraries containing about 4000 volumes in all. There was a separate weekly library period provided in the time-table as

part of the normal school work. There was, therefore, no obstacle in the way of the students making use of the libraries. This arrangement had existed for long in the past but it was observed that students in general hardly produced anything which was not a direct product of textbooks memorised. The members of the staff were one in their opinion that this was not a satisfactory state of affairs and that steps should be taken to effect an improvement.

At first it was thought that lack of opportunities for self-expression was the main reason for this shyness and apathy on the part of the students. It was, therefore, proposed to start a fortnightly wall magazine in which students' compositions would be published. The publicity thus given was expected to provide an incentive to the students for unaided work. The novelty of the proposal caught the imagination of the students, and contributions for the first issue came with satisfactory promptness. But the enthusiasm waned when the time for the second issue came and later on it declined so much that it was not possible to bring out more than three issues in the whole year.

The practical failure of the measure made it more imperative to take effective steps for the attainment of our desired objective. Our enquiries made it clear that want of subjects on which to write was the main reason why unaided compositions were not attempted by students. This meant a dearth of ideas which could only be removed by wide reading. So we decided to lay special emphasis on library work along with the incentive already provided in the form of the wall magazine. It was arranged that students would borrow books from the class libraries and read them more regularly, make notes from the books read and while returning a book, the borrower would submit to the teacher in charge a writing based on the ideas assimilated from the book read.

No restriction was placed on the nature of the writing. It could be a poem, an appreciation, a criticism, an analysis of a character or a summary. The only condition imposed was that it must be written by the student himself. The student was given whatever help he needed by the teacher in charge, including explanations of difficulties encountered and suggestions for the writing. There was some initial difficulty as the class libraries did not contain an adequate number of "readable" books and as the teachers themselves had not read every one of those books to be able to give the assistance needed by the students with promptness. We recognised the difficulties and decided to go on trying to remove the difficulties as we proceeded. Within a reasonable time, the students and the teachers got used to the sort of work they had taken in hand and

we began to receive articles from the students in steadily increasing numbers. In a year we received about 160 articles which sufficed for the wall magazine to be issued regularly. Encouraged by this result, we decided in the following year to give the students more extended facilities for library work.

For this purpose, we have provided three periods per week in the time-table for library work under the name of supervised study. During these periods, the students read silently in the class, the books borrowed from the class library. A student is allowed to retain a book until he has finished reading it either at school or at home ; and when he returns the book he submits a writing along with it. Records are kept of the books borrowed and the composition submitted by the students. From the results attained so far it appears that the scheme is making steady progress. During the first four months of this experiment we have received 372 articles from the students—a thing which was inconceivable two years earlier. To publish all those articles, we started a weekly wall magazine in each class and have also arranged for the publication of the best writings of each class in the general wall magazine of the school.

There has been one other encouraging indication. The students have been giving us increasing numbers of drawings and paintings for display in the wall magazines along with their writings. This shows that the creative impulse is becoming active and seeking expression through the medium of the brush along with that of the pen. Naturally, we expect this creative impulse to permeate all the fields of their activities.

There are various difficulties which we have been trying to solve as we go on. In the first place, there is the difficulty of books. We have not been able to provide the class libraries with an adequate number of books interesting to the students. As the interest aroused by the book is the principal factor for the success of supervised study, the first necessity is to provide the class libraries with attractive books on a variety of topics suited to the stage of development of the reader. But up to the time of reporting we have been able to supply to each class library only five books in excess of the number of students in the class, and even so, every one of these books is not sufficiently appealing to the readers. We have been trying to increase the number of readable books in the class libraries out of the annual library grant for the school ; but the grant being rather scanty it will be years before a tolerably satisfactory position may be arrived at.

The second difficulty is the dearth of adequate juvenile literature which places before the young readers instructive matter in ways

that appeal to them and interest them. In West Bengal, today, the market is flooded with hundreds of so-called 'adventure novels' containing stories of detectives, or ghosts or hidden treasures of the writers' imagination. The authors vie with one another in providing thrills and more thrills—which is the only element to ensure a market for it—and with this end in view, they invent the most fantastic stories to be placed before the imaginative adolescent. We have not included this class of juvenile literature in our class libraries. But omitting these books, it has been very difficult for us to find books which are enjoyed by young readers of different stages of development. As it is beyond us to find a solution of this difficulty, we only hope that our authors will gradually care to produce juvenile literature of the right type.

The third difficulty is about the teacher who is not thoroughly conversant with the contents of each of the books in his class library. For such a teacher is not in a position to give the guidance and encouragement needed by the readers—a factor on which the success of the scheme entirely depends. But instead of waiting for the time when every teacher in charge has thoroughly read every book in his class library, we have started the work and the teachers have made it a point to read and re-read the books with which they are not thoroughly acquainted. We expect that within a reasonable time the teachers will be in a position to guide the students in respect of any book in their charge.

The intention of the scheme is the enrichment of the wealth of ideas of the students and the increase of their capacity for unaided expression. It will be a difficult matter to evaluate these qualities with precision. But if it is found that the scheme succeeds in producing in the students a distaste for cramming and an eagerness for acquiring real knowledge and power of expression, it will have amply served its purpose.

Up to the present time we are at the stage of providing incentives and encouragement. So we care more for the output of unaided work by the students rather than for the quality of that work. But as time goes on and as the students feel some confidence in their own capacity for self-expression, it may be possible for us to set a minimum standard for the compositions. From that future time, we hope, we shall be able to classify each piece of composition according to five grades, A, B, C, D, E and it may afford us interesting evidence as to how a student's capacity develops as he passes from year to year, as also how the norm of a class changes as the class moves up in the school ladder.

If, in those future years, we can provide each class library with a large number of books on a variety of subjects and topics so that

each student may choose the books on the topics he likes best, our records will indicate the topics which catch the interest of the students at various stages of their emotional life and at various levels of intelligence. A comparison of the records of these supervised study-classes with the examination results of individual students may also give us useful data.

Parallel Forms

It is now universally accepted, at least in theory, that if we are to insure purposeful activity on the part of students it is necessary to make provision for individual differences in abilities and attainments through adequate organisational arrangements and effective teaching procedures. One organisational arrangement that has been found to be workable and helpful is that of parallel 'streams' or parallel forms. The Doon School has experimented with this type of organisation and found it useful.

"Each class has parallel forms, divided on the basis of ability in English, Mathematics and Hindi. No section has more than 25 boys; in fact, most of them have less than 20, so that it is possible to attend to the individual needs of a boy. If a form is called D, it may have three sections called Da, Db, Dx, arranged according to the ability of boys. For Mathematics and Science, boys of this form will form different groups which are called da, db, dx; and for Hindi another set of groups, named after the master who takes them. This means that a boy who is good at English, History and Geography, but poor in Science and Mathematics and very weak in Hindi will be in Da, Db, and Mr. X's group, whereas if he is very bright in all the three subjects he will be in Da, da and Mr. Y's group. If a boy, for reasons of health, cannot keep pace with the form in which he was originally placed, he is moved down to a weaker section, or is moved up in case progress is good. The syllabus of these sections is more or less the same; only the brighter section's boys do difficult work, whereas the weaker sections cover a less detailed course."

CHAPTER III

CURRICULUM

In this chapter are reported some experiments conducted by schools in the field of the Secondary school curriculum. What with the pressures exerted on schools and teachers by such external agencies as universities, departments of education, boards of examination, inspectors and supervisors, and professional, commercial and industrial concerns, they are hardly in a position to attempt any significant experimentation in the field of curricular reorganisation. The experiments here reported have been conducted within the limitations imposed by prescribed curricula and syllabuses. They can be better described as attempts to promote the development of children—intellectual, emotional, physical, moral and spiritual—by working with the curricula and syllabuses that have been laid down and putting them to the best possible use. The justification for including them in this section on the curriculum is the wider modern interpretation of the term 'curriculum' to include all educative experiences designed to provide children and youth with the best possible training and experience to fit them for the society of which they form a part. Although according to this interpretation, co-curricular activities would also form a part of the curriculum, they will, just for the sake of convenience, be dealt with in the next chapter.

Multiple Courses

The reorganised scheme of Secondary education envisages, among other things, the provision of a large number of courses and activities in an institution to cater to the varied needs and aptitudes of pupils. For this purpose, it is proposed to establish a large number of multi-purpose schools all over the country. Some schools, however, had already introduced multiple courses before the Secondary Education Commission made this important recommendation. The report received from Rajah's High School, Kollengode, is reproduced here because of the uniqueness of one of the courses provided by it.

"A significant experiment carried on in this institution is the simultaneous provision of instruction in academic and aesthetic subjects, giving art its due place in education and affording opportunity for the cultivation of both academic talents and aesthetic tastes. Three 'bifurcated' courses have been sanctioned by the Department besides the usual academic course. They are (1) the

secretarial course, (2) music, and (3) dancing (*Kathakali*), thus giving facilities for pupils who desire to go to the university, for those who desire to choose commercial and secretarial careers, for girls having a talent for music, and for boys and girls who have an aptitude for dancing. *Kathakali* equips boys and girls for a lucrative profession as well.

In regard to *Kathakali*, a dance technique peculiar to Kerala, it may be mentioned that this is the first time in the annals of the history of education that this art has come to be introduced in the curriculum and given its rightful place in the community life of a Secondary school. Within three years, pupils can get, besides a theoretical knowledge of the subject, a sound practical skill in this art. We feel too that it can be combined harmoniously with instruction in the academic subjects. Besides being a course of training for a career as a professional *Kathakali* dancer to a talented pupil, it can also be a healthy hobby to others."

Aesthetic and Constructive Types of Schools and Courses

Even before the Secondary Education Commission was appointed, the Uttar Pradesh Government had accepted the principle of 'bifurcation' and divided the course of studies at the Higher Secondary stage into four main groups or types, namely, the literary, the scientific, the constructive and the aesthetic—each catering for a particular type of student. The subjects to be taught in each group were divided into two sections—the main subjects and the subsidiary subjects. "The main subjects are the very life of the group. They are the subjects that specially supply the intellectual and emotional needs of the students offering that group. They are expected to develop the taste and foster the personality of the student. It is in these subjects that the student will specialise and will make his mark later on. The subsidiary subjects will help the main subjects. They also serve another purpose. If a student discovers after studying for some time that he has made a wrong choice of main subjects and that he should have offered as main subjects some of those that he has taken as subsidiary subjects, he can make a change over. Although most of the subsidiary subjects are offered in all the four types of schools, yet it should not be understood that the same course will be taught under them in the different groups. This is obvious from the fact that in different groups they have to subserve different main subjects.

The most important feature of the scheme is the recognition of the fact that the study of subjects involving the use of the hands is as good as the study of literary or scientific subjects. The dignity of labour has been restored and an effort has been made to remove

the sense of inferiority that goes with the study of subjects of a practical nature."

"The ideal thing" in the opinion of the Uttar Pradesh Government, "would have been to offer the four different types of courses in different institutions. In that case, it would have been possible to create a special bias and atmosphere for the main subjects, and thus to stimulate and inspire the students to dip in the love of learning so far as that particular subject is concerned."¹ But this has not been possible because of financial difficulties and other handicaps. Hence some of the schools that have been established in the implementation of this scheme are unilateral, some bilateral and others multilateral.

Teaching of the Mother Tongue

Very little experimental work has been done in this field ; and yet growth in the use of the mother tongue is the basis of the child's development—not only his intellectual development but also his emotional and social development. As the Secondary Education Commission has rightly emphasised, effective teaching of the mother tongue may well raise the whole level and quality of education.

The New Era School in Bombay has developed its own syllabus for the teaching of Gujarati, and its own methods of teaching. Through continuous experiments in this field, the school has been able to publish a series of ten books, which are the first seatbooks to be published in an Indian language. These have been recognised as textbooks by the Department.

Teaching of Hindi

Another area in which little experimental work has been done is the teaching of Hindi to non-Hindi speaking children. Perhaps no other subject is so badly taught in the Secondary school than Hindi as a second language. One reason for this is that it is generally entrusted to untrained teachers.

At the Scindia School in Gwalior the teachers have made some observations which may be of help to others.¹ I shall quote from the report submitted by this school.

"Whereas correction and drill work have been found useful it has been noticed that it is wide reading of books along with the writing of free compositions that has produced the best results. It has not been found helpful to do much correction in the case of these free compositions, because it makes the pupils so conscious of

1. *Realisation of a Dream*, pp. 73-74, Department of Education, Uttar Pradesh, Allahabad, 1949.

their language difficulties that it engenders a feeling of diffidence. Such work has been used merely for building up self-confidence in the boys in their ability to express themselves freely in the language. Plenty of oral work in the classroom, dramatisation and elocution are some other means that have been found useful in helping boys come up in Hindi more quickly than mere drill work."

Teaching of English

In the new set-up in which the time given to the learning of English has been considerably reduced, it is extremely necessary to experiment with new techniques of teaching and to evolve a method whereby it is possible to give the Secondary school child a good working knowledge of the English language. The child that goes in for higher studies beyond the Secondary school stage will particularly benefit by a good knowledge of English which he will need for a very long time to come to read textbooks and journals related to the higher studies he is pursuing. There is little evidence, however, of experimental work in the teaching of English. Teachers seem to adopt the line of least resistance and, by and large, the translation method predominates. Only one school has reported anything like an experimental approach to the teaching of this subject.

The New Era School in Bombay reports : "We make use of the Direct Method of teaching and have a specially planned syllabus. We have been able to publish a series of four books—the Cameron and Choksi Readers—along with teachers' handbooks, based on our syllabus. These have been recognised as textbooks by the Department."

General Knowledge Classes

One of the defects of the existing system of education, in spite of its overemphasis on knowledge, is the inadequate general knowledge that our students possess. This has been pointed out by various agencies like the Public Service Commissions that conduct competitive examinations. The principal reason for this seems to be the stranglehold of the textbook in the scheme of teaching, which, in turn, is the result of the emphasis on examinations. Our students do very little general reading, and few schools have libraries that are worth talking about. Under the circumstances the experiments conducted at the Vasanta College in Banaras and the Birla Vidya Mandir in Naini Tal with General Knowledge classes should interest others.

(i) *Vasanta College, Banaras* :—The school has organised General Knowledge classes for all its students, and in these classes

subjects of practical importance such as personal hygiene and dietetics, the working of civic bodies like the municipality and of public utility services like the post office, and practical knowledge about the uses of electricity in the home are dealt with.

(ii) *Birla Vidya Mandir, Naini Tal* :—A graded course in General Knowledge has been framed to acquaint the pupils with elementary facts about the world around them, their own and foreign cultures, current history, modern technical and commercial developments, the main philosophical trends and current thought. It is intended to help students by honest study and broad-minded tolerance to understand the complexities of modern life, to develop a capacity to test opinions without prejudice and precipitancy, a robust common sense and a healthy outlook on life.

Weather Observations

A couple of schools, including St. Raphael's Intermediate College at Indore, have reported on the practice of conducting regular observations of the changes in the weather. Various measuring instruments have been installed in the school garden of St. Raphael's, and students of class VIII have been made responsible for making the observations and noting the readings, which they do "faithfully and perseveringly". The students are divided into groups, and they take turns in taking the readings every morning. The tables and charts prepared by them are put up in the school hall for all the students to read. The students are not satisfied with merely recording facts, but learn how to interpret them. They learn, for example, "how a clear moonlit night brings the minimum temperature curve to a sudden fall, while a cloudy night causes its rise; or how a north wind bends the maximum temperature curve down." At the end of a year, the students make a careful, comparative study of the records, and see how they agree with those given in the newspapers. The records for different years are also compared one with another.

Training in Homemaking

In the teaching of Domestic Science and training in Homemaking, there is an almost unlimited scope for experimentation, provided only that the teacher has imagination and a progressive attitude towards her work. Courses in Domestic Science in other countries have been broadened and modernised. There is a new emphasis on resources education, that is, the utilisation of resources at hand. The art of homemaking, including the fundamentals of gracious entertaining, can only be perfected by practice. It may not be enough to confine activities in Domestic Science to classwork alone. It may

be necessary to engage in extra-class activities such as interviewing interior decorators, analysing the homes of friends according to the principles learnt, staging demonstration breakfasts, lunches, and dinners, entertaining guests, sewing clothes for orphanages and other similar purposes, etc. It would not be unfair to say that the handling of this subject in our schools leaves much to be desired. There is room for greater enterprise on the part of our teachers of Domestic Science.

(i) *St. Raphael's Intermediate College, Indore* :—This school has submitted a report on the work done in this field, which reveals greater than usual enterprise.

In sewing, in addition to the requirements of the syllabus, the girls prepare useful articles like boxes, doilies, dress decorations, caps, etc. All these things are kept till the end of the year for display at an exhibition to which they may invite their parents and friends. By making small presents for their parents or brothers and sisters, the girls learn to fill their leisure hours and experience the happiness of giving something to others.

Similarly, in the housewifery classes the girls make small articles for table decoration and the decoration of their homes. They cultivate plants and flowers which are put in self-made plant-hangers and presented to their mothers on Mothers' Day.

For their cooking, the girls work in groups of three. The group that prepares the best dish has the privilege of decorating the table and serving the food. This is an incentive to them to do their best. Working in groups also helps to develop the right team-spirit. When they know their recipes well enough, the girls are encouraged to invite their classmates, who have not taken up Domestic Science, for a party. This makes the learning of table manners and of the art of entertaining visitors easier and more effective. The girls make their own "cook book" during the course. These books are exhibited at the time of the annual exhibition.

(ii) *Banasthali Vidyapith* :—Practical training in household work is compulsory for all the students at the Vidyapith. It includes sifting, grinding, cooking and other allied jobs, tinning of utensils, laundry work, dyeing, and the making of soap, oil and vaseline. For this purpose, the students from classes VI to XI, excepting class X, have been divided into groups of about 50 each. Each group is placed in the charge of a lady matron who is assisted by one or two maid servants. The life of the group is organised by the students themselves. They prepare their own meals, manage their ration stores, supervise sanitation and cleanliness, and organise the cultural and recreational life of the group. Thus, training in the

art of homemaking has been made realistic and its educational potentialities exploited to a considerable extent.

Teaching of Agriculture

In the curriculum suggested by the Secondary Education Commission for the Secondary school stage, Agriculture is one of the seven groups of diversified courses. In the general thinking of educational administrators, Agriculture is regarded as a suitable subject only for village schools to be taught primarily to village children. It is, therefore, heartening to find that even Public schools are introducing Agriculture in their schemes of work. For example, at the Rajkumar College, Raipur, Agriculture is offered as an optional subject for the Cambridge School Certificate Examination, and quite a good number of students are offering this subject. It is taught in the top four classes of the Senior school. There are four parts to the syllabus, besides practical work. They are : (1) soil and soil fertility ; (2) annual and perennial crop production ; (3) forestry ; and (4) animal husbandry. The school has a farm and an orchard and also maintains a dairy, all of which provide facilities for the practical work of the students.

Teaching of Music

"Music is in the very soul of man. The happy spirit of play bubbles forth in the child. Melodies of love flow from the lips of the young at heart. Songs of toil and suppression and longing gush forth as life-blood from those who work and suffer. The pulse of the nation throbs in its music. Music is an intrinsic part of drama and worship. It is indispensable alike to the most solemn ceremony and to the most jubilant occasion. It is a part of public gatherings and it is in the very fibre of the home. Music is in the evening concert of insects and in the busy wheels of industry. Music is in the beat of the horse's hoofs and in the machines of an office. Music comes from magic boxes conceived by man and from magic organs created by One Supreme. Music is a common language among men. If they do not create or perform, they listen."¹ Every teacher and educational administrator, I am sure, can appreciate the sentiments expressed in this beautiful paragraph from the pen of Nellie Zetta Thompson. And yet, in how many Secondary schools in this country is there any provision—I am not saying adequate provision—for the teaching of Music? In my opinion, the finest and the most valuable recommendation made by the Secondary Education Commission is the inclusion of Music, Art and Craft in the Middle school curriculum. "These subjects demand expression and

1. Thompson, N. Z., *Your School Clubs*, p. 260, E. P. Dutton & Co., Inc., New York, 1953.

achievement, with as much importance in their own way as the purely intellectual subjects ; and they can be used for the education of the human mind as easily and effectively as the so-called intellectual subjects....As valuable media for the development of the emotional side of the mind, their place is certainly higher than that of the ordinary subjects. Their inclusion in the school curriculum is valuable for the proper development of the emotions and helpful to the growth of other aspects of the personality, intellectual, aesthetic and spiritual."

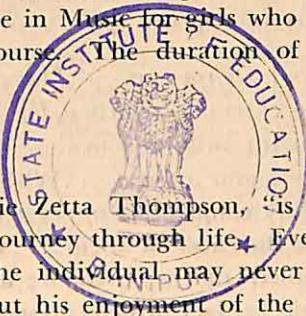
(i) *New Era School, Bombay* :—Music has been a regular school subject for all the classes since 1930, and dancing has formed an integral part of school work. Songs have been specially composed for community singing and two editions of community songs in book form have been published already. For the first time in the history of Gujarati literature, nursery rhymes in that language were composed at this school and published.

(ii) *The Doon School, Dehra Dun* :—Music is a regular activity at this school from the lowest form to the highest. In the three lowest forms (age level 11 plus to 14 plus) it is obligatory for every boy to attend the music class for one to two periods of 45 minutes each per week. In the next two forms, he has a choice from among three options—music, arts and crafts—and is required to attend classes in the selected activity for three periods a week. In the top form it is entirely optional. On Sundays and half holidays also boys may attend the music school for creative activities. The boys begin by learning the school assembly songs and other such well known songs as appeal both to the heart and ear, and provide a foundation for further study and practice, but they can also learn, if they like (and if they are musically gifted) to play the flute, *sitar*, *dilruba*, *tabla* or even piano and violin, or *jaltarang* or *ghunghuroo*. An annual inter-house music competition is held and is looked forward to with great interest. It consists of four items: house orchestra, a chorus by senior boys, a chorus by juniors, and a vocal or an instrumental solo; and those who have attended these annual functions have noticed how enthusiasm and loyalty for one's house can help in drawing the best out of one.

(iii) *Banasthali Vidyapith* :—Music and art are compulsory subjects up to the V class. Thereafter a girl has to take one of these subjects. In the art of music, from the very beginning, the use of the harmonium is prohibited, and in its place other instruments are used. In the experience of the school authorities, the use

of the harmonium in the early stages is unnecessary and also harmful in the sense that, once one gets used to it, it becomes a habit that is difficult to leave off. Even in the primary classes it is possible to teach music with a classical background. The school also runs a special diploma course in Music for girls who had had Music during their High school course. The duration of this special course is two years.

Teaching of Art



"Art", says Nellie Zetta Thompson, "is the search for beauty which enhances the journey through life.* Everyone can be an artist in his own way. The individual may never create a picture or a piece of sculpture, but his enjoyment of the work of others can be sharpened. Civilization's artistic heritage should be known to all students. If there is a marked talent in a student, it should be cultivated, although the talent may never materialise into more than a lifelong, pleasurable pastime. The application of art is a part of everyday living. Good taste in colour harmonies, backgrounds, graceful lines, and good proportions can transform the appearance of a person and provide a background conducive to mental health in the home. Nature becomes more beautiful to the trained eye, because perception of the earth's beauties is keener." "Art," a Chinese writer has said, "is what one might call an essential luxury. A rich man with no appreciation of art becomes unbearably poor; while a poor man with an inner delight in art and the outward ability to express beauty becomes immeasurably rich."

A well-known art critic in this country, addressing a group of student-teachers, once remarked, "There is no culturally progressive country in the world that I know of where art is so much neglected in education as in India." And who can refute this statement? How many schools in the country can report facilities for art education as the following three schools?

(i) *New Era School, Bombay* :—The school has its own syllabus in art, and has laid stress on child art, that is, on the spontaneous and creative aspects of art. The school was the first in India to produce a booklet on child art some five years ago. The Art Department in this school, as in a few other schools that have kept pace with the modern developments in art education, recognises, in the first place, that the canons of child art are peculiar to the individual child, and secondly, that what the child has to express is not only

1. Thompson, N. Z., *Your School Clubs*, p. 67, E. P. Dutton & Co., Inc., New York. 1953.

more vital but also more important than anything that can be impressed upon him. It believes also, with Marion Richardson, that "art is not an effort of will but a gift of grace—to the child at least, the simplest and most natural thing in the world. Whenever people are sincere and free, art can spring up."

(ii) *The Doon School, Dehra Dun* :—“There is no better test of a good education than the extent to which it has equipped the boy to live every moment of his life fully and to view everything around him with increased sensitiveness and interest.... With the increasing hours of freedom that we rightly claim, it is imperative that a boy should be taught how to make the most of them.... To our minds, to be free is not to be unoccupied—that is boredom ; it is our being able to do what we want to do, a fact which presupposes that we have acquired an interest.” This is the basic philosophy underlying the commendable provision of facilities for the study of Music, Arts and Crafts in this school, which views the work done by the boys in these fields as being as important as their work on books, or their achievement on the playing fields.

Art, along with Music and Crafts, is an obligatory activity in the lowest three forms (age level 11 plus to 14 plus). In the next form a boy may opt for any one of these activities, in which he has to attend compulsory classes. In the last two forms there is no compulsion and he may visit the Art (or Music or Crafts) school whenever he is free. On half holidays and Sundays the three places are open to all the boys, and it is found that most of the creative work is done during these periods. In the Art school, boys can work on any one or more of the following : sketching in pencil, painting in oil or water-colour, engraving on wood or linoleum, embossing leather, modelling in clay, relief work in cement-concrete, stone and wood carving and pot-painting and, for the less imaginative, pottery and bookbinding. The master in charge of the Art school is assisted by a stone-carver, a bookbinder and a potter. The school has demonstrated that “a high standard of work can be created within a short period when interest is the motive of learning, and when the artist in the child can be recognised and respected and not constricted by having to conform to rigid techniques.”

(iii) *Banasthali Vidyapith* :—Art is a compulsory subject up to class V. Thereafter the student has a choice between Art and Music. The task of the art teacher is to guide the students in the matter of techniques ; otherwise, the student is left free to take up any theme that suggests itself to him out of his observation or imagination. The colours are generally prepared from the available local earth and stone ; but students also use the colour boxes sold in the market.

The school also offers a special diploma course in painting, as well as some others, for the benefit of children who have special aptitudes. This course in painting extends over two years and can be taken after the *Sanskrita* or middle stage. High school students may take this course along with their course in general education.

Teaching of Crafts

The development of Basic education has been responsible for an increasing interest in the crafts in Secondary schools, although it can be said that such interest is sufficiently widespread. What are the outcomes of craftwork that the good teacher of crafts desires for his pupils? "In all handicrafts the teacher expects an awakening of latent interests in the child and an instinctive satisfaction in manual activities. Craftwork enables a child to overcome whatever self-consciousness still exists in him and gradually develops in him a group consciousness instead. Then, as the child participates in group activities, there is witnessed a steady growth in self-control, patience and courtesy. Other desirable qualities to receive an impetus from group or individual projects are the qualities of originality, initiative and orderliness. The knowledge gained of the various materials and their qualities, of the different tools and the manner of using them, is significant at this acquisitive stage, but even more important to the child's social growth is the development of cooperation, willingness to take turns, and eagerness to share. As the child advances from one project to another and from the use of one medium to another he gains a recognition of the need for durability in good craftsmanship and joy in creating a useful and a beautiful article. He also finds joy in experimenting with materials and realises power in adapting materials to his own uses. Gradually there comes a muscular coordination and a discriminative judgment that contributes to the child's physical well-being, to his emotional control, and to his mental poise. And finally, creative experience in the field of crafts lays a basis for constructive and vital leisure-time occupations; for discovery of a sustaining interest or interests is the solution to the problem of the wholesome use of leisure. Young people's experimental, manipulative work, at first seemingly purposeless and lacking in direction, begets lasting and more definite occupational interests and hobbies."¹

The following accounts of experiences with different forms of craftwork will show how some of these values have been sought to be achieved.

1. Pires, E. A., *Pedagogic Musings*, pp. 54-55, B. G. Paul & Co., Madras, 1948.

(i) *Vasanta College for Women, Banaras* :—“In the Middle school classes we have introduced various crafts such as cooking, gardening, cardboard work and other basic crafts. Such crafts are taught as will be of use to the girls in after life. We believe that these crafts will make them alert and active. Our aim in introducing these crafts is also to train them in the cooperative spirit and to instil in them a sense of the dignity of labour.”

(ii) *Christian High School, Kharar* :—This is a vernacular school in which English has always been an optional subject. From class V upwards, as a fairly large number of boys did not offer English, crafts were provided for them. The following crafts were taught : carpentry, weaving, ornamental leatherwork, canework, book-binding and tailoring. Later on, it was felt that every boy should be given a chance to learn some craft ; and so it is now provided for every boy up to class VIII. The time allotted for craftwork in each of these classes varies from one to three periods a week. It has been noticed time and again that those who are not good at scholastic subjects are quite up to the mark in handwork : “When the scheme recommended by the Secondary Education Commission is given effect to, we shall have no difficulty in offering these different crafts even in the High school classes, since every boy will have had some craft or the other for three years before he comes to class IX.”

(iii) *Maharani Gayatri Devi Girls' Public School, Jaipur* :—The school has provision for the teaching of crafts right from the kindergarten to the pre-Cambridge class, and a variety of crafts are taught in the different classes. In the High school the following types of craftwork are included in the syllabus : cardboard work, leatherwork, tablet weaving, weaving, *alpana*, ornaments for dramatics, vanity bags, and papier mache. All the classes also do handwork relating to their classwork in the different subjects.

(iv) *The Doon School, Dehra Dun* :—Craftwork is a compulsory activity in the three lowest forms which correspond to the Middle school stage. In the rest two forms it is an optional activity in the sense that a boy has to choose from among three options, namely, Music, Arts and Crafts. In the final year it is entirely optional. The workshop, besides being fully equipped with carpentry tools, has also a blacksmith's forge, wood-turning lathes, and a six-feet metal lathe, a shaping machine, a power drill and a blower ; so the boys can try their hands at making anything from a wooden toy to a gun or even a piece of delicate scientific apparatus. “The woodwork instructor, aided by three other instructors, has turned out many an efficient craftsman and supplied many a home with not only reliable odd-job men but

with people who will be able to equip their homes with articles of such taste and finish as will be the envy of even a professional.... Scores of boys have shown a special interest in making wooden saucers, bowls or fruit stands, or—when they were mere beginners—in making wooden toys or bookstands, and in their more ambitious moods, a hive of tables or tea trolleys, not for the mere pleasure of self-expression but for the pride of making a present of these things to their people at home."

(v) *Schools in Uttar Pradesh* :—Reference has been made already to the establishment of "constructive" schools in Uttar Pradesh. These are really Higher Secondary schools having a craft bias. The introduction of crafts in these schools has restored the dignity of manual labour. The following crafts have been provided for ; (1) woodwork, (2) craftwork, (3) metalwork, (4) spinning and weaving, (5) agriculture, (6) industrial chemistry, (7) ceramics, (8) tailoring, (9) leatherwork, (10) home-science for girls. In order to prepare students for craft work at this stage, crafts have also been introduced at the Junior High School stage on a compulsory basis. Students are required to choose one of the following basic crafts : spinning and weaving, woodwork, metalwork, book-craft, agriculture and housecraft (for girls only). Art, too, is a subject of compulsory study at this stage.

Scheme of Practical Education

The Banasthali Vidyapith, which is a residential institution, has developed an interesting scheme of practical education for its students. It includes household work, a number of crafts and manual labour. The whole body of students is divided into two groups. Each group devotes three days in the week to household work, two days to any one of the crafts according to choice, and one day to manual labour. The household work is organised on realistic lines, and the work is done, as far as possible, in the way the girls will have to do it in their after-student lives. They are given training in sifting, grinding, cooking and other allied jobs, and in tinning utensils, laundry work and dyeing. Included in the course on household education is a working knowledge of some home-prepared medicines, so that the modern tendency of too much dependence on the doctor may have the necessary correction. One practical and useful result of this training in household work is that a portion of the students' evening meals is prepared by themselves. It has been noticed that students in the higher classes do not appreciate the importance of this kind of work. They lay greater emphasis on book-learning and examinations. The experience of the Vidyapith authorities, however, is that the training so given is

of great use to them afterwards. Besides keeping up practice, which is so necessary in this work, the students also learn to prepare many useful things. In addition to spinning, which is compulsory for all, there are arrangements for the following crafts: *durrie*, *niwar* and carpet weaving, book-binding, vaseline and oil making, leather-work, toy-making, tailoring and sewing. Every student takes up one of the crafts according to her age as well as choice. Manual labour includes, besides other work, sweeping the classrooms and gardening. As in household work so also in manual labour the younger girls take to it with interest and enthusiasm, but the college girls do not feel much interested except on special occasions.

Health and Physical Education

One of the basic needs of growing boys and girls is to develop and maintain good health and physical fitness. A good programme of health and physical education should include (1) adequate health services, that is, physical examinations and follow-up medical attention, (2) instruction in health practices, and (3) various physical education activities designed to provide adequate exercise and recreation. Analysis of the average Secondary school programme reveals that the first two elements, health services and health instructions, are either omitted or largely neglected. Some schools, particularly girls' schools, offer an optional course in physiology and hygiene which is taken up by some of the students; the rest get no health instruction. As for the third part of the programme, physical education, this is required by regulation; but the compliance with this regulation generally tends to be of an indifferent nature. The principal difficulties in the way of implementing an adequate programme of physical education are absence of playgrounds, lack of equipment, and shortage of properly qualified teachers.

Physical education programmes have been best developed in the 'Public' schools which have the necessary equipment and facilities for the purpose. Some private institutions, which charge high fees have also provided adequate programmes of physical education.

(i) *Birla Vidya Mandir, Naini Tal* :—The physical education programme aims at helping the growing child to develop a healthy muscular body, endurance, physical strength, agility, courage and self-reliance. The higher psychological value of physical education, which lies in inculcating a sense of real sportsmanship, of team spirit, of fair play and understanding for one another, is also kept prominently in view. Through the major games a definite effort is made to impart a habitual sense for the importance of coordinated effort and for subordinating personal interests to those of the

community. The institution sees to it that the physical education imparted really bears such fruits.

Instruction is given in gymnastics, athletics, swimming, the defensive arts of boxing and wrestling, sports and almost all the team games. In the gymnasium, training is imparted in weight lifting, rope climbing, rope exercises, straddle horse, dumb-bells, rings, beams, parallel bars, ladders, Indian *asans* and other Indian and western feats. Both in gymnastics and in sports, stress is laid on those events which are recognised at the Olympic games. All games are conducted under the supervision of the masters, the director of physical education being in overall charge of the day's programme. P.T. is conducted regularly every morning before breakfast. Swimming is a favourite sport among the boys. An experienced instructor teaches swimming in the lakes of Naini Tal and Bhim Tal. Several boys are trained every year for the life-saving certificate. Skating and riding are liked by many; so the skating hall at Naini Tal is occasionally reserved for the boys of the school and horses for special instruction in riding can be hired. Boating on the Naini Tal lake is a glorious sport, and boating parties are arranged and the boys go out under escort of the masters.

There is a sports committee which consists of the four sports captains of the four houses and the school sports captain. These are all elected by the students. Other members of the committee are the general sports secretary, the school director of physical education and the school manager. The committee meets the Principal to discuss seasonal programmes, to arrange matches and competitions with other institutions, and to organise outings and trips.

(ii) *Mayo College, Ajmer* :—All boys take part in physical training including apparatus work, and a high standard of training is maintained. All boys take part in the main college games, cricket, hockey, football and swimming. Coaching is also provided in tennis, athletics, boxing and squash, out of which every boy must choose at least one activity. A system of stars is designed by which every boy becomes entitled to a badge if he is able to complete the standards in the physical efficiency tests for the group to which he belongs. For the purpose of these tests and also for playing games, boys are divided into groups according to their athletic indices.

The Civil Surgeon, Ajmer, is in medical charge of the college, and exercises a close supervision over its health and hygiene. Except for very minor ailments, boys are moved to the well equipped college hospital in the sick wards under the supervision of a resident medical officer who lives on the premises. In all cases of illness, the Principal keeps the parents of the boys informed about their daily

progress. A medical history sheet is maintained for each boy from the time he joins the college. All students and boys receive a full medical examination at regular intervals, and records of height, weight and chest measurements are taken at the beginning and end of each term. The services of a qualified dentist are available when required. Infectious cases are isolated in the college hospital.

(iii) *Jeevan Bharati, Surat* :—The school has a regular programme of physical education. Every year it arranges a physical education week, and every pupil is required to take part in the several competitions that are held and a record of his achievements is maintained. Some of the items are compulsory for all the pupils, while the others are voluntary. Pupils show keen interest in them despite the fact that no prizes or medals are awarded. It has been the practice not to give prizes, but to keep records and announce them on the notice board and also before the public invited at the end of the week when a demonstration of physical feats is given by the students.

(iv) *Banasthali Vidyapith* :—Participation in physical education activities is compulsory for all the girls. Besides games and sports, the programme includes a number of drills and exercises, and cycling, riding and swimming.

(v) *Christian High School, Kharar* :—The school has only one playing field, but makes the maximum possible use of it. The whole school is divided into four houses, and each house is further divided into groups of 25 students each. Supervised games are arranged every afternoon. Each house has a turn once a week. One group of 25 is engaged in a major game while other groups play minor games—either team or circle games.

The Report of the Hyderabad Secondary Education Workshop contains some useful suggestions for schools in the organisation of their physical education programmes. Schools with adequate facilities for physical education could usefully conduct experiments on the lines suggested in the report. "It has been truly said that the battle of Waterloo was won on the playfields of Eton. Even so, the battle of life can be won on the playfields of our schools. It is here that the boy learns to control his temper, to exercise judgment, to think quickly and to act decisively. In order that this aspect of school life may be productive of the maximum benefit, it should be organised on sound lines. Boys should be given a good deal of training in organising the daily routine of the physical education classes. They may be placed in charge of cleaning and levelling grounds, marking them, tying nets and getting ready necessary equipment for games, leading other boys in physical jerks and

orderly movements, and even supervising games. In short, regular and systematic training in leadership should be given to the boys who have the aptitude for it."

Moral Education

The development of ethical or moral character is one of the avowed aims of education. The inculcation of definite moral principles in the minds of growing children is an important function of the school. As the International Team on Secondary Education has pointed out, there are three means by which individuals can acquire a sound moral character which is the basis of effective citizenship :

- (i) by precept—or learning through what is formally taught ;
- (ii) by example—or learning through the observation of others ;
- (iii) by experience—or learning through doing, that is, by active participation.

The importance of the teacher's own example in the moral development of his pupils cannot be overemphasised. "The teacher builds his own thought structure into the mind of the pupil ; begets him with his own purity, strength, and sweep of emotional life ; breathes into him the breadth of his own ethical nature."¹ Experimentation in this field simply means that teachers should strive their utmost to set a good example to their pupils through their conduct both in the classroom and outside it. The bad example of a single immoral teacher in a school can offset the effect of the good example of the rest.

Let us now briefly review the few experiments that have been reported in the field of moral education.

(i) *Providence Girls' High School, Nagpur* :—At the beginning of every month, at the school assembly, a motto is proposed to the whole school which the girls are encouraged to consciously and sedulously live up to. Examples of the kind of mottoes proposed are : love of parents, honesty, proper use of time. The motto is written on the blackboards and notice boards, commented upon at subsequent assembly meetings and in the moral instruction classes. It is proposed as the subject of an essay and the best essay is read at the school assembly. Occasionally, short dramas are prepared on the theme of the motto and acted by the pupils. It has been found to be a stimulating and practical way of teaching morals.

1. Tompkins, Arnold, *The Philosophy of Teaching*, p. 4, Ginn & Co., Boston, 1894.

The senior girls of the school do social work in a neighbouring slum area. To make them more conscious of their responsibilities in this respect, the principles of social ethics are discussed with them at special meetings arranged for the purpose. The girls collaborate enthusiastically by posing their individual queries on the betterment of the conditions of the working classes.

(ii) *St. Raphael's Intermediate College, Indore* :—An experiment similar to the above has been conducted in this school. The students in class VI or VII select a motto as a guiding idea to help them mould their character. They keep this motto till class X. A number of suggestions are made by the students from which the most appealing thought is chosen to serve as a motto. They then prepare drawings expressive of this idea, and with the help of the art teacher the best design is selected. They then choose the artist who will draw or paint the design and inscribe the motto. When it is ready it is hung up in the most prominent place in the classroom. On this occasion the motto is fully explained by the teacher, and from that day onwards the students endeavour to 'live' their motto in the opportunities offered by their daily school and home life for little acts of self-control, obedience, kindness, etc. This daily living helps to mould their characters. An example of an effective motto is 'Truth and Fidelity'. The drawing depicted two large flaming torches flanking the inscription :—

"Truth in thought, word and deed :

Fidelity to our duties :

As Children of God ;

As Citizens of India ;

As Students of St. Raphael's."

(iii) *Banasthali Vidyapith* :—"A very potent method of helping the child's moral development which has been followed in the Banasthali Vidyapith is to face her with the daily occurrences of life now and then, to interpret and explain those occurrences to her in such a way as to enable her to see the merit or demerit of a particular way of behaviour, and thus to help her in the right development of her personality. A specific illustration of a recent incident will elucidate the method followed. A student knew the marks obtained by the students of a particular class in a particular subject in which her father was the examiner. She told another student something about the result of the class in the subject after having taken a promise from the latter that the secret would not be divulged. This latter student, however, disclosed to the examinees not only the little information she actually possessed, but also posed

to tell them much more, which in fact she did not know. This created a stir amongst the examinees as the information given to them was very unfavourable. The real occurrence created an opportunity of much educational significance. Through personal talks with the examinees, an attempt was made to impress upon them that it was not proper for them to have become perturbed at the unfavourable news. The right thing for them would have been to prepare for the following paper undisturbed, because success in life goes to them who have the determination to face situations as they come without being nervous. An attempt was also made to impress upon the student whose father was the examiner the advisability of giving out secret information, because failure to retain a secret to oneself sometimes creates very awkward and unpleasant situations in life. The student who was responsible for spreading the information amongst the examinees was convinced of the great mistake she had committed in making a breach of the confidence which a friend of hers, unwisely, had reposed in her, because one of the greatest qualities that a person can possess consists in being trustworthy. As this situation was coolly dealt with in a psychological way, as the import of the mistakes of the students concerned was shown in its proper perspective by relating those mistakes to similar situations in wider life, and as no outright condemnation of the defaulters was made so as to produce in them a resistant and non-receptive attitude, it was possible to dissolve the psychological complexes that had arisen amongst the students against one another, and the disturbed atmosphere caused by that incident was normalised. With the help of such daily occurrences in life it is possible to guide the students effectively in the development of right standards of thought and action. The method, in our experience, also leaves no room for any kind of bitterness, and is very helpful in improving the general conduct and morality of the students."

(iv) *Christian College School, Madras* :—The school has conducted a successful experiment in developing the quality of trustworthiness in the boys. The report of the experiment reads as follows : "In the organisation of the school many things are arranged on the assumption that school children, in general, cannot be trusted. The vast majority of children can be trusted and even the rest will respond to trust if one shows faith in them. Schools should plan their activities on the basis of mutual trust between teachers and pupils. This school was faced with the problem of keeping the boys away from street vendors who sold sweets and nuts outside the school gates. To meet this problem as well as to show that the boys can be trusted, the boys were encouraged to provide four 'honour

counters" in the four houses of the school. The Boys' Council raised a small capital to buy nuts for the first day and opened the "honour counters." The prices are marked on a small board kept near the tins of nuts and sweets, and there is a cash box with a slot in it into which the boys deposit the price of the quantity they take. In the evening the boys in charge of the counters count the cash and write on the board the gain or loss for the day. On the whole, the arrangement has worked well, although once in a way there may be a loss. There is reason to believe that boys who occasionally take away things without depositing the price, apparently because they are short of pocket money, reimburse the cash box in the course of the next few days. The street vendors have moved away from the school gates as a result of this arrangement."

(v) *Scindia School, Gwalior* :—"There was a growing feeling in the school community that some place and time should be set apart for the cultivation of an awareness of the spirit. This has now found expression in the *astachal*, which is an evening assembly in an open-air circular structure dominated by a statue of Gandhiji as 'The Pilgrim'. There is an evening call at which the whole community of students and teachers assembles at the *astachal* or 'hill of the sunset'. They sit facing the sunset listening to a story or a talk on the spiritual life. Sometimes devotional music is played. The assembly concludes with a silent meditation for about five minutes. The emphasis in this assembly is more on the good life than on religion. It is evident that the school community has come to attach special importance to the *astachal*, and both the present and the past students regard it with thoughtful affection."

Religious Education

According to the Indian Constitution, religious instruction may not be given in State schools. It may be given in denominational schools to the children of that particular faith. It may also be given to other children whose parents have given their consent thereto, or, if they have attained the age of maturity, if they themselves have consented to be instructed.

Reports have been received from two schools which have conducted experiments in this field.

(i) *Boys' Town, Nasik* :—"The school is open to all children, irrespective of caste, creed or colour. With a view to inculcating a thorough cosmopolitan outlook of a healthy and inspiring nature, mass prayers are held and selected verses from the *Gita*, the *Avesta*, the Bible, the *Koran* and other religious books are recited. The ideals of great prophets and eminent world personages are stressed

upon the boys, and a comparative study of religion is encouraged. On columns specially erected around the Boys' Town Court Chamber are inscribed the teachings of the Great Masters, and these have been carefully selected to demonstrate the fusion of all religions."

(ii) *Birla Vidyamandir, Naini Tal* :—“The school imparts to students of all classes religious instruction on the main principles of Hindu Dharma as well as on the sound basic ideas of all the great religions and philosophies of the world. The teachings contained in the *Upanishads*, the *Bhagwat Gita*, the *Ramayana*, the *Mahabharata*, the *Holy Granth*, the Buddistic Dharma, the Canon of the Jains, the *Koran* and the *Bible*, are placed before the students in as inspiring a manner as possible. In the lower classes this is done mainly by narration of stories and incidents from the lives of outstanding religious personalities with whom we meet in Indian history or mythology and in the religious tradition and present day practices of other religions as well.”

The philosophy underlying this scheme of religious education may be noted. “For developing a free, strong and fearless personality, religion is fundamental. Religion includes morality but is not identical with morality. Religion is the ultimate or absolute stronghold of any fully developed personality. Proper religious training should help the students to throw off the crust of superstition that envelops society. It should cultivate the spirit of religious enquiry and tolerance, and encourage the study of the basic religious thought of all great religions. It should stimulate the growth of right motive and good purpose, not only in intention but also in effective action. It should develop in the boys a moral backbone capable of bearing the strain of all temptations, and nurture in them a spirit of sacrifice, love and courage. Students should cultivate a genuine reverence for the individual, the country, humanity and the living God.”

CHAPTER IV

CO-CURRICULAR ACTIVITIES

The progressive school must needs have an around-the-clock interest in the development of boys and girls. The strictly academic curriculum fails in fundamental ways to satisfy the needs of youth. A broader philosophy of education accepts responsibility for the total development of young people, helping them to a greater extent in finding themselves in relationship to the world around them. School administrators must assume as one of their major responsibilities the sponsoring of a comprehensive programme of co-curricular activities not provided by other community agencies. This is particularly necessary in this country, where the number of such agencies is so negligible. Wherever a variety of interesting, well organised and supervised student activities have been introduced, the holding power on the student body has become strikingly evident. Moreover, the co-curricular programme provides opportunities for students to choose and explore fields of knowledge and activity in which they are interested. It is a means of caring for individual differences and improving pupil-teacher relationships. It encourages and helps growing boys and girls to do their own thinking, reach decisions, learn self-discipline, grow in respect for and understanding of others, and develop qualities of leadership. With the teachers as leaders and guides, the co-curricular activities programme can be so organised and directed that it will prove a year-round means of dealing with personal, school and community problems. By participating in rich and satisfying group experiences, students will be learning the basic elements of democratic citizenship.

There may be nothing very special about some of the activities reported in this chapter. The purpose of this report will have been served if the attention of schools where any of these activities have not been attempted are drawn to them.

Field Trips and Excursions

(i) *Banasthali Vidyapith* :—The Vidyapith occasionally takes its students to some nearby village or town to study life and conditions there. First, the teacher concerned gives a preliminary talk to the students, explaining to them the aims and objectives of such trips, the type of information that is to be gathered in the course of a particular tour, and the places and persons to be visited in that connection. Then a comprehensive questionnaire is prepared. The students in the course of their trip gather necessary

information bearing on those questions. Then the teacher gives a concluding talk based on the information and experience received in the course of the trip. The students are also asked to write their own impressions about it. It has been experienced that impressions received through such direct and practical methods are more lasting, and the information gathered gives a concrete and living picture of the life and conditions of the village or town studied. Such information proves very helpful in explaining to the students the various social, economic, and educational problems before our country and our people.

(ii) *Scindia School, Gwalior* :—“The school has a social purpose even in its academic day-to-day work. Besides the usual effort at coordination of lessons and arranging of talks on various subjects which bring out the wider aspects of each subject and link them with current events, the school every year organises visits to a number of places of interest. The boys collect information, enlarge their notes, and prepare charts, diagrams and maps to illustrate their talks which they have to give after every trip. In the beginning the boys did not like to take down notes, make sketches or draw plans, and they were reluctant to develop these or to pursue the subject matter further; but with the improvement in our technique, with better planning and through the cooperation of people responsible for these places we have been able to place at the disposal of our boys a record of previous years which acquaints them with the entire line of work, its purpose and the standard achieved in the past. This has built up a tradition and provided a challenge for a higher standard of work by the new group. The talks given by the various technicians during the course of the year have also improved greatly and conform well to the requirements of our various age groups. This has necessitated developing close personal contacts with these people. Invitations are sent to them to visit the school, see the work of the boys and comment on their notes, maps and diagrams. This relationship has proved very useful in our securing the right kind of assistance from all concerned in ample measure. It has at the same time broadened the mental horizon of our boys and given them a first-hand knowledge of the details of the working of various institutions and organisations ranging from the sewage farm to the Government and covering activities in various fields like the town water supply, the postal system, the railways, research laboratories, the farm and the dairy and industries like textiles, leather, cement and pottery.

These visits are planned not for any particular subject, but for the purposes of Social education. The boys not only learn facts but also secure a first-hand experience of various situations of

different kinds of activities and of the relationships between groups and between members of the same group."

(iii) *St. Xavier's High School, Bombay* :—The school has been trying to foster the excursion spirit among its boys so as to enable them to see things at first hand. For example, during the last five years large parties of boys accompanied by teachers, have successively visited Northern India, South India and Ceylon, West Bengal, Kashmir, and Bhopal and Sanchi. Places of historical importance, industrial centres, and places reported for their architectural and natural beauty are included in the itinerary. Such towns give the boys an insight into the vastness of our land, its variety and, above all, its unity. These educational tours have now become a regular feature, and are arranged either during the long summer vacation or during the October holidays. During the last vacation a party of 30 boys from this school and from St. Mary's High School, undertook an extensive tour of Italy, Switzerland, West Germany, Belgium, Holland, England, France and Spain. Throughout the journey on the Continent the party travelled in a coach. The tour was highly educative and served the valuable purpose of making the boys internationalminded. In many of the cities visited, specially in Spain, the boys received a hearty welcome from the inhabitants. Several boys made movies of the tour, some of which were shown in the school.

For the great majority of children, their wanderlust would have to be satisfied within the environs of the school. But it is surprising how much profitable experience can be had in seeing one's native area through new and appreciative eyes. This, however, implies careful preparation of even local excursions and field trips. Then, students can travel the seven seas by means of books. Every school library should have a large travel section. In addition to books, magazines like *National Geographic* and *Travel* should be included. Travel films may also be shown in the visual education classes. Schools could very profitably encourage correspondence with students in other countries. All these methods of vicarious travel can be thoroughly enjoyable and educative. Those fortunate children, whose number is gradually increasing, who are in a position to travel far, need preparation before they start on a tour. To make travel truly educational, there should also be provision for evaluative experiences following the trip.

School Camps

Except for children who are members of school scout or girl guide troops, there are hardly any facilities provided by schools for camping. Camps should be a regular feature of school life, and

most of the planning and organisation should be entrusted to the students themselves. Camps can be a powerful means of character building and personality development. One school, the New Era School, Bombay, that has experimented with camps, attributes the following values to camping.

Through camps pupils can achieve self-confidence and self-reliance, and the ability to make their way through unknown surroundings. Coping with the elements and emergencies develops individual character traits. Camping gives a boy a closer contact with his fellow students and with his teachers, and enables him to share work, fun and responsibility with others, thus developing the attitudes of cooperation and sympathy. It develops the qualities of leadership and followership in real life situations. It also helps to bridge the gulf between city life and village life and to develop a sense of the dignity of labour.

There are other possible outcomes of camping that are less obvious but none the less attainable if properly cared for. Camping often enables young people to discover spiritual values that they had not perceived before. The wonder of Nature brings students closer to God, and the study of the night sky closely relates science and religion. Group living demonstrates the value of ethical principles.

A detailed report of the experiment with school camps that has been conducted at the New Era School in Bombay should prove to be both interesting and useful. This school has been holding camps for the last five or six years. Usually the pupils of the ninth standard have gone camping for a period of eight days. Before the camp, the children are asked to fill up a questionnaire which tries to find out their needs, interests and habits. On the basis of this, a list of the things to be taken to the camp is prepared. They also practise tent-pitching so that they can do this job efficiently and without an undue loss of time. At the camp, the children do practically everything themselves. They pitch the tents, cook the food, clean their utensils, wash their clothes, sweep the camp grounds and keep them clean and tidy. The idea is that they should have a chance to rough it out, to accept little hardships cheerfully and to observe the camp discipline scrupulously.

For the organisation and conduct of camp activities the children are grouped into various committees. The following committees are usually formed :—

- (1) Purchasing and Finance Committee—for making purchases and keeping the accounts.

- (2) Health and Sanitation Committee—for looking after the cleanliness of the camp and hygiene of the campers. This committee prepares the latrines and sees that they are kept clean and hygienic; it is also in charge of first-aid.
- (3) Watch and Ward Committee—for keeping watch over the camp at night and looking after its general safety.
- (4) Kitchen Committee—for looking after the kitchen arrangements, e.g. distributing the rations to the different patrols, giving out the utensils, etc.
- (5) Tent Committee—for looking after the transportation arrangements, the pitching of tents, and the organisation of hikes, games and camp fires.

One or two teachers are included in each committee to guide the students whenever necessary.

The cooking is done in patrols, twice a day. Only vegetarian meals are prepared. A definite time is allotted for cooking and the meals are expected to be prepared within that time. The same rations are distributed to the different patrols, but the dishes prepared need not be the same.

Games sessions are arranged during the camp; but the children find them 'not long enough'. Where facilities exist, they are also permitted to swim. When hikes are arranged, they receive instructions to observe and study things en route. They are supplied with a questionnaire on the basis of which they are required to bring back information from the villages which they have to cross. The questionnaire deals with such items of information as the population of a village, the different crafts and the number of craftsmen, the various castes and occupations, housing conditions, sanitation and cleanliness, the crops, the kinds of trees and animals they come across, and the types of clothing. When they go hiking, the students carry their own rations and fuel and cook their food where they are expected to conduct their investigation. They are entertained by the village folk and in return they entertain the villagers at night at their camp fire. The greatest value of this part of the camp activity is that the students are able to realise that India is not all like the city of Bombay, and that there are thousands and millions of people who have all kinds of needs which are not satisfied.

The most thrilling duty of all is the night watch. Most children have never kept awake at night, and here they get their first experience of it, with this difference that they are here responsible for the safety of all the others who are sleeping. As the night

watch has to be observed with silence, it helps them to learn self-restraint.

The camp fire programmes provide opportunities for creative effort, and the children participate in them eagerly and without any shyness or awkwardness. The appreciation of non-participants is spontaneous and sincere.

No work is considered mean by the students. On the contrary, it is encouraging to find them vying with one another in doing such jobs as sweeping and washing. Even apparently fastidious children are anxious to do jobs that are otherwise regarded as mean. Again, children who are usually considered lazy in the class are found to be very active and willing to undertake the toughest of jobs like wood chopping and tending the camp fire.

When the students return from the camp they present an assembly programme in which they narrate their experiences. The narratives are illustrated with sketches and photographs. A class magazine is ultimately produced by the students attending the camp.

Literary and Debating Societies

A common co-curricular activity in schools is debating, and most schools that have an active co-curricular programme have a literary society or a debating society which meets from time to time. Besides debates, elocution and other literary contests are sometimes arranged. Eminent speakers are also invited to address the students. The following report of the Birla Vidyamandir 'Parliament' is indicative of the scope of its activities which is wider than that of similar organisations in most schools.

"With a view to foster the art of public speaking and of parliamentary practice and procedure, to train the boys in good citizenship and to promote the spirit of brotherhood, the Birla Vidyamandir Parliament was started in the year 1950 and has proved to be a great success. It has become a potent force in affecting and moulding the conduct of the pupils. It is not only the perennial fountain of parliamentary elixir to the Vidyamandirians, but it also imparts specific training in leadership and represents an important agency for developing good techniques of discussion, fostering respect for the opinions of others, and promoting a desire for the maintenance of dignity and decorum. Debates, literary and handwriting competitions, elocution contests in Hindi and English, tournaments and dramas are organised by the Parliament. The Parliamentary dinner, before the long winter vacation, is always one of the grand occasions of the school. To become a good Parliamentarian and to win one

of the various Parliament prizes is the ambition of so many. A master acts as the Speaker of the House and the Principal is the Patron. The Parliament has its own Constitution."

The function of speech clubs today has to be wider than that of the old-time debating society. In a democracy, persuasive speaking and extemporaneous speech are as important as debating. Whereas debating teaches advocacy, discussion emphasises inquiry; and inquiry must precede the advocacy of an opinion. It is, therefore, necessary that school societies which are concerned with the development of speech should recognise that their main preoccupation cannot be just developing a few orators. Rather, they should strive to improve oral communication generally, to correct speech defects, to develop poise in social situations, to enable the individual to take his rightful place, and make his voice heard, as a citizen. The goal should be proficient speakers rather than platform speakers.

Dramatic Societies

Many schools have dramatic societies, but few dramatic societies function adequately enough for the students to derive the fullest possible benefits from them. The value of dramatics in the personality development of boys and girls has not been fully appreciated by teachers. If it had been, dramatics would have been allotted a bigger place in the curricular as well as the co-curricular programme of schools. Dramatics, in schools, must be used to educate the performers, and not merely to exhilarate the audience. The benefits of the dramatic programme must be made available to all students, specially to those who need them the most. The general tendency in most school programmes is to restrict these benefits to those who do not need them, relatively speaking. There is an evident temptation to stage "show" for the public, with the result that only the most capable are selected to participate in them. If dramatics are to serve truly educational purposes, they must be used much more extensively than they are today. Every child in every class should be provided with liberal opportunities for participation in dramatics; but this can only be done if dramatics are correlated with the regular curricular work. As the Report of the Hyderabad Secondary Education Workshop maintains, "lessons in languages, science, and the social studies lend themselves admirably to self-expression through plays and short skits;" and the resourceful teacher will be quick to seize all such opportunities. As a technique of teaching, too, dramatisation can be very effective. A dull and disinterested class can be transformed into an attentive and lively one by helping them to dramatise the lesson.

In a comprehensive programme of this type, the school dramatic society can serve a special purpose. It can encourage students who possess histrionic talents or have acquired an interest in dramatics. It can help such students to perfect their techniques of acting. It can expand their knowledge of the theatre—its history, its forms and its personalities. It can help them to appreciate drama as an art as well as a powerful social force. Reading and discussion, listening and watching will be necessary to accomplish these ends. It can make use of motion pictures, recordings and the radio (and when it comes, television) to help students evaluate drama. It can foster an active interest in community dramatics after leaving school for those students who are really able and interested. There is another category of students who can benefit by active membership of the dramatic society—those who are interested in stagecraft. Pupils with mechanical and business aptitudes, with abilities in costume and set-designing, or with service interests can all be useful members.

For the vast majority of boys and girls who do not possess any special histrionic ability, dramatics have several significant values. Through acting, they learn to enunciate more clearly and to express themselves more vividly. They develop confidence and poise and gain intellectually and culturally. By understanding, experiencing and appreciating the thoughts, feelings and actions of others whose roles they play, they gain an insight into the problems of human living and are better prepared to live their own lives. Lessons of cooperation and perseverance are also learnt in the process of preparing and acting plays.

(i) *New Era School, Bombay* :—This is the only school that has sent a fairly long report on its dramatic activities. An interesting feature of the plays that have been reported is that they were improvised, thus providing opportunities for creative work. One year the school celebrated Mahatma Gandhi Week, and in this connection the pupils of the ninth standard staged a shadow play with a musical accompaniment and a running commentary. The play had a single thought as its central theme, namely, *Vaishnava Darshan*, that is, the examples of the great *Vaishnava Janas*—Narsingh Bhagat, Mirabai, Mahatma Buddha, Tukaram, Ramdas and finally Mahatma Gandhi. The musical accompaniment consisted of both instrumental music and choral singing, including Mahatmaji's favourite song *Vaishnava jana to*, depicting the various attributes of Vaishnavas. In another year, on the occasion of *Gokul Ashtmi*, the pupils of the fifth, sixth and seventh standards enacted an elaborate 'project' play—*Bal Lila* or the childhood of Shri Krishna. The programme was replete with music, dancing and *ras garba*.

The participation in this play of the pupils of the three classes was cent per cent, not a single child being left out. Then again, on another occasion the Hindi Department of the school presented a Hindi play emphasising Hindu-Muslim unity. Like the other plays, this play too was characterised by the scope it gave to the students for improvisation. It revealed the amount of dramatic talent that can be unearthed through careful exploration. The theme of the play was Emperor Humayun's march to Mewar at the invitation of his accepted sister Karnavati who sent him a *raksha* and asked him for his help. It was a highly effective play.

(ii) *The Doon School, Dehra Dun* :—The Doon School Book gives a long account of dramatic activities in this school. In addition to full length plays and open air pageants of which one or two have been produced regularly every year, many one act plays or sometimes symposia of historical value have also been produced in the school by various language masters, or even by boys, and sometimes by a society, usually the Tagore Society. For many years now it has become the custom that each term at least a couple or so of one-act plays, either aided or unaided by masters, are staged by the boys in the assembly hall. Also, on the last night of each term all the houses celebrate what they call 'Golden Night', when they invite a few guests to dinner, and after the usual speeches, entertain them with music and one-act plays.

Other Societies or Clubs

Besides literary, debating and dramatic societies, a number of other societies or clubs can be organised in schools. Such school clubs or societies are the vigour of the co-curricular programme, and serve a large number of purposes. The more important of these functions are : to broaden the cultural horizon of the pupil ; to supplement the formal curriculum through additional opportunities for increasing knowledge and skills ; to discover and develop special aptitudes and abilities ; to prepare pupils for a constructive use of leisure time ; to teach socially desirable attitudes and ideals ; to contribute to the formation of improved behaviour patterns ; to democratise education ; and to offer opportunities for vocational exploration.

A number of schools have sent reports on the working of such clubs or societies. A few of the more interesting reports are being reproduced here.

(i) *Municipal Board Girls' Higher Secondary School, New Delhi* :—This school has an art club which is quite popular. Those students who have a flair for art join special art classes where opportu-

nities are given for expressional water and oil colours, pottery painting, paper and cardboard work and papier mache. Some members enter for art competitions.

The Historical Society and the Geographical Society of the school are quite active. Members of the former write pamphlets, arrange for historical talks, organise excursions to historical sites, show films, and enact dramas and dialogues from history. They also collect coins and pictures of historical places. Members of the Geographical Society also write pamphlets and organise trips to places of geographical interest like the Bhakra Dam. Besides useful picture, they also collect specimens of soils, stones, metals, grain etc.

There is also a Junior Red Cross Society which functions in every class of the school. It aims at promoting the objectives of health education, social service and international friendship. Help is organised and given to needy and suffering people. Correspondence with children in foreign lands is encouraged, and the pupils exchange pictures, magazines and other articles with these foreign pen friends.

(ii) *Birla Vidyamandir, Naini Tal* :—An unusual kind of club is the Collection Club functioning in this school. The club does a great deal for the enrichment of studies by collecting and making available for classroom use illustrations, pictures, specimens of flora and fauna, newspaper cuttings, stamps from all over the world, utensils characterising particular sections of folklore, skeletons, birds and butterflies, and whatever else may appear worth collecting and capable of stirring interest.

The Science Association of the school arranges for lectures and film shows, and organises exhibitions and special study circles which, as supplementary activities, help in making the understanding of scientific principles more concrete, fuller and richer.

The Photographic Club, adequately equipped with a dark room, writes the visual history of the school. It supplies material for publication in the *Vidyamandir Patrika* and for adorning the albums of the boys. It is a resourceful assistant to a number of hobbies of the boys.

(iii) *Vasanta College for Women, Banaras* :—The Vasanta Sangh, which is a 'socio-cultural-intellectual' club caters to the needs of both the seniors and the juniors. The activities of the club have been varied and have included debates, brains trusts, music competitions and lectures by eminent speakers on a wide variety of subjects. The Sangh programme is drawn up by the Students' Council with the advice of the staff.

(iv) *The Doon School, Dehra Dun* :—This school has some fifteen or sixteen societies. "Their main purpose is to stimulate a fuller use of leisure, to cater for outside interests, to provide opportunities for discussion and for exploring by-paths that cannot be fully followed up in the classroom; or, to put it briefly, to make life more fun. They provide boy-officials with opportunities for organisation and all their members with opportunities of meeting under conditions that vary the monotony of the ordinary routine."

The work of a few of the more interesting and unusual groups will be described here.

The Chess Club meets regularly on alternate Tuesday nights to play chess in the school library. Occasional school matches are held, and in the short term there is a championship and in the long term an inter-house competition.

The Colloquium is the school Mathematical Society. It consists of members from the post-certificate and certificate forms. It meets on alternate Tuesday nights when the chess club is not meeting, and papers are read and discussions held on a variety of mathematical topics. The commonest subjects are: the history of mathematics; relativity; mathematical paradoxes and fallacies; statistical subjects; mathematics in relation to engineering; and astronomy. The Colloquium runs a mathematical prize competition, consisting of three papers, one in the short term and two in the long. It has constructed a sun dial and is in charge of a 72-inch telescope.

The Engineering Society offers encouragement to boys who are thinking of becoming engineers. If boys have worked in the machine shops during their arts nad crafts periods in the lower forms, they become associate members and are exempt from elementary training in the shops. They are encouraged to make apparatus for the science laboratories as their 'labour quotas'. Other boys have to undergo a course of training in the use of the metal lathe, etc. The society exists primarily to systematise the use of the machine shops in spare time. Expeditions are arranged to other local workshops and technical works to increase interest in the engineering profession. It has special sections for radio and motor mechanics.

The Musical Society has two secretaries, one for Indian music and another for Western music. They are responsible for selecting the gramophone records that are played at the morning assembly. At the meetings of the society, talks are given on different composers and discussions are held about different types of music. The

society organises occasional Saturday night concerts and also an annual inter-house music competition.

Hobbies

Every school should encourage its pupils to take up interesting and useful hobbies. A hobby has several values. It can give status to the child whose academic work is only just average or sub-average as well as to the child with special aptitudes and interests. It can animate social interaction through the sharing of a common interest, and is in this respect specially valuable to the quiet, withdrawing type of child. It is recreative and makes for rounded development of the personality, specially of the academic type of student. It helps the growing child to capture and develop the art of entertaining himself in his leisure moments.

While several of the activities enumerated in the previous three sections may be considered to be hobbies, the emphasis in those societies or clubs is more on cooperative effort and group entertainment than on personal recreation through individual activity or self-expression. In this section we shall consider some of the hobbies in the real sense of the term, for which provision has been made in some schools that have submitted reports.

(i) *The Doon School* :—The school encourages a number of hobbies, one of which is stamp collecting. The Philatelic Club in this school owes its origin to the efforts of a few enthusiastic collectors. It was founded in 1939. Meetings are held once a fortnight, on Sundays, when the president or a senior member gives a talk. Exhibitions of stamps are arranged and put on view in show cases outside the headmaster's office. Thus the club hopes to guide the activities of those who are already stamp collectors and to stimulate interest in others. Every term new members are shown a film entitled 'The Pageant of the Postage Stamp'.

(ii) *Boys' Town, Nasik* :—Boys keep themselves usefully and pleasantly occupied by selecting any three of the following hobbies during their entire school career :—

1. Industrial chemistry :—Preparation of hair pomade, boot polish, soap, tooth-powder, etc. for the Boys' Town Stores.
2. Clay modelling :—Making models of historical personages and other eminent personalities for classroom use and also for sale to other schools.
3. Drawing and painting :—Engaging in art activity for the sake of art and also for carrying out classroom projects.

4. Scientific model making :—Utilising scrap materials for the understanding of scientific principles.
5. Gardening :—Working in the school garden and thus acquiring a knowledge of horticulture.
6. Music :—Learning music for the joy and pleasure that it gives.
7. Carpentry :—Learning to make useful household articles.

(iii) *Rajkumar College, Raipur* :—This school has recently introduced plastic work as a hobby, and a number of boys have taken it up and are getting a great deal of fun out of it. It is not a difficult hobby, nor does it require much outlay in the form of tools. A number of articles, both useful and beautiful, have been produced by the boys. They include such things as razor-blade holders, table-lamp stands, ash trays, cigarette boxes, photo frames and flower vases of all shapes and sizes.

Exhibitions and Melas

Exhibitions are a necessary corollary to hobbies and handicrafts, and most schools that provide for hobbies and handicrafts hold periodical exhibitions of their pupils' work. To be educative, students should be entrusted with the work of arranging and displaying the exhibits and of explaining them to the visitors.

(i) *St. Raphael's Intermediate College, Indore* :—This school has reported a feature of its annual exhibition that is rather unusual. Besides the art work and the handicrafts of students, including scientific apparatus for physics, chemistry and biology prepared by the boys and needlework done by the girls, the school has made it a practice to exhibit the homework books of the pupils. This is done "to stimulate the students to do their homework regularly and neatly".

(ii) *Banasthali Vidyapith* :—The Vidyapith every year holds a *bal mela* or a children's fair. The important sections of the fair are : (1) A marketing section, consisting of a number of shops selling eatables and other articles either prepared by the students of the Vidyapith or purchased from outside. The prices are fixed previously and the students do the selling. (2) A banking section, consisting of a bank organised and staffed by students. The bank issues its own currency for use in the *mela*, receive deposits from all the students and the staff in cash against which the local currency to the corresponding amount is paid to them, and gives loans to student-shopkeepers who later repay their loans out of the sale proceeds. The students keep full accounts of the bank. Cheque

books are issued to all the depositors for use in the *mela*. (3) An entertainment section, which organises programmes of music, dances, and sports for general recreation. The *bal mela* is a very effective means of practical training in business and banking practices, in organisation and in social discipline ; above all, it is a very good means of collective recreation.

Celebrations

The opportunities provided by the annual recurrence of our great national festivals and the birth anniversaries of our great men and women can be profitably used by our schools for the education of their pupils. Our Basic schools have shown the way in this respect, and our Secondary schools are gradually learning from their good example and beginning to hold appropriate school celebrations on these occasions. The special value of such celebrations lies in the fact that they can help greatly in developing among our pupils a love for their motherland and a tolerance for the various religious groups in the country.

(i) *Jeevan Bharati, Surat* :—The school celebrates Krishna Jayanti, Rama Jayanti, Ishu (Christ) Jayanti, Mahavir Jayanti, Tagore Jayanti and Paighambar Jayanti. The programme consists of lectures or talks, songs, *kirtans* and other items of entertainment. These programmes are sometimes recorded in a special number of the school magazine. Thus the school tries to inculcate in its pupils a respect for all religions.

(ii) *Banasthali Vidyapith* :—The Vidyapith reports that it holds a number of functions and celebrates a number of festivals in the course of the school year. The chief responsibility for organising these celebrations rests on a special committee consisting of some student representatives and some members of the staff. The students thus get useful training in organisation and in cooperative effort, and the social and moral aspects of their personalities are given opportunities for development.

(iii) *Municipal Board Girls' Higher Secondary School, New Delhi* :—In this school the responsibility for the organisation of social functions and the celebration of national days and festivals devolves upon the 'Ministry of Recreation and Entertainment', which is one of the four ministers of the Pupils' Parliament. Two societies—the Dramatic Society and the Music Club—function under this Ministry. For these celebrations the talents of as many pupils as possible are utilised. Pupils write their own plays or adapt some suitable plays. They also compose their own poems and songs to suit the various occasions.

School Publications

Quite a number of schools in the country publish an annual magazine, but only rarely is it based on the work done by the students for their class magazines or subject magazines. The result is that a very small proportion of students are really encouraged to write for the magazine. A few schools have reported the publication of monthly magazines, which is a commendable practice.

(i) *Boys' Town, Nasik* :—“*The Boys' Chronicle* is published every month with a view to giving a free scope for self-expression to budding Boys' Town writers and to create in them a love for journalism which plays a very important part in the development of our country. The articles that the boys contribute to the Chronicle serve to widen their mental horizon and to prepare them for future citizenship. The topics selected for writing deal with several fields including politics, history, biography, science and fiction.”

(ii) *St. Mary's High School, Bombay* :—The school publishes a *Monthly Review* which is edited by an editorial board consisting entirely of boys. The articles contributed are on all types of subjects ranging from serious discussions on topics like “The Value of Compulsory Games” to light writing like the article on “The Most Creative Art of Fooling”. The *Monthly Review* gives glimpses of the students' activities during the month, including games and sports. It is written in English, but also has a Hindi section.

(iii) *Birla Vidya Mandir, Naini Tal* :—“*The Birla Vidya Mandir Patrika* is a monthly magazine which reflects the entire life of the school community and records the day to day history of the school as written by the students. The *Patrika* is also a magazine of the masters, and thus assumes the role of a pioneer in voicing the educational ideals that guide the school. Further, it serves as a bond for establishing a firm and intimate contact between the school and the community of guardians and friends, the old boys, the other Public schools in India and the general public. Its editorial board consists of a student chief editor and ten joint editors, each in charge of one of the ten sections of publicity that it provides for. Each joint editor is assisted by a master. The *Patrika* is a great stimulus for creative writing. It provides the student editors considerable training in the exercise of judgment, in the composition of coherent issues, and in dealing with the several hard problems of publicity.”

(ii) *The Doon School* :—There are quite a few schools, specially among the Public schools, that publish a monthly magazine. There are also a few schools, though their number is smaller, that publish

fortnightly bulletins. The Doon School, however, publishes a weekly. "The editors of *The Weekly* are usually five in number, one chief editor and four editors. They are all students, and the four editors represent the four houses. They meet in the rooms of the manager, who is a master, usually after lunch on Mondays to discuss what is to appear in the issue of the following Saturday. *The Weekly* normally has four pages, though once or twice a term a six page issue appears to relieve pressure. Often at the Monday meetings it seems as though there may be insufficient material, but every week unexpected contributions appear, and by Friday the editors are almost invariably in a dilemma about what to leave out. Almost all boys are voluntary subscribers although the subscription eats quite a large hole into their pocket money. Saturday breakfast is eaten in unaccustomed silence as everyone plunges his head into his morning paper. The subject matter is somewhat less formal and more light-hearted than that of English school periodicals. For these reasons it is probably read with more interest by a large number of boys, and it does a good deal to intensify interest in school activities in general. It is sent each week to all members of the Old Boys' Society and always contains news about their doings that has come to hand since the previous issue."

School Banks

A few schools have reported the organization of banks run by the students themselves. The main purpose of school banking is to encourage thrift. Another purpose is to teach banking procedure through actual doing. This is an activity which any enterprising school could organise without much difficulty. In a school with a rich co-curricular programme, the financial administration of the various school activities can be handled by the school bank.

(i) *Boys' Town, Nasik* :—The Boys' Bank is run entirely by the boys. The object is to give boys experience in practical banking. The bank loans money to the Boys' Stores, Tuck Shop, etc., which are thus adequately financed to do their business. The loans are returned with interest which ultimately goes to the student depositors and shareholders.

(ii) *Rajkumar College, Raipur* :—Money does not circulate in this institution. A boy must deposit all his money at the beginning of each term in the school bank, make his payment by school cheque, and keep proper accounts. Any money sent for a boy in term time has to be sent direct to the boy's housemaster and is credited to his account.

This practice is also followed in some other Public schools. The Mayo College, Ajmer, reports a similar practice. It helps to

inculcate the banking habit in boys at an early age. It may appear at first thought that such a practice is workable only in a residential school ; but there is no reason why it should not work equally well in a day school.

School Stores and Tuck Shops

Many schools, particularly residential schools, have their own stores and tuck shops, but it is not a common practice to let the students run them on their own. The management and promotion of a supply store or a tuck shop involves activities like electing a board of directors, selling stock, purchasing equipment and supplies or merchandise, bookkeeping auditing, advertising, declaring and paying dividends and publishing reports, all of which can be highly educative for the students involved.

Boys' Town in Nasik reports as follows : "There is a boys' store which is entirely managed by boys who maintain accurate accounts and learn practical salesmanship and bookkeeping. There is also a tuck shop financed by the Boys' Town Bank. It sells wholesome 'eats' and often prepares delicacies, thus giving students the rudiments of the culinary art."

School Post Office

In Boys' Town, Nasik, there is also a post office which caters to the postal needs of the place. It is actually a Branch post office working under the direct control of the Nasik Head Office. The boys work in this post office and thus get acquainted with post office routine.

School Museums

Developing a school museum can be a highly educative project. The fault with many school museums is that they cease to grow after a time, depriving new batches of students of the joy and the educational benefits of collecting articles for the museum. Every department of the school, including the students of art and crafts, should help in the collection, mounting, labelling and displaying of articles. Building up a school museum should be a never-ending process. If necessary, because of shortage of accommodation, new exhibits may be allowed to replace the old, provided they are not of an inferior quality.

A second point about a school museum is that it should be put to the maximum possible use in the teaching of the various school subjects. It should not be a mere show piece for visitors to admire.

The Jamia Secondary School at Jamia Nagar, Delhi, has the following to report about its museum : "Our students' activities

which are the direct outgrowth of the subject clubs like the History Club, the Geography Club and the Science Club are very popular with them. The educational possibilities of this system of school clubs are very promising. The members of our clubs have collected a good deal of material for study and exhibition in their different subject museums, and have demonstrated how a school museum can grow richer and more educative every year if there is some system and vitality in the methods of teaching. In the teaching of History and Geography, Delhi is the starting point in our courses of study. The teaching of History is closely related with our Delhi Museum which provides exhaustive information on the history, monuments, culture, industries, and existing institutions of Delhi. Similarly, the teaching of Geography is correlated with the Geography Museum."

Constructive Work

With a view to make students worthy and capable citizens, a scheme of constructive work and self-help was launched by the Government of Uttar Pradesh in Government Higher Secondary schools and Normal schools during the year 1952-53. The aim of this scheme is to inspire students to do manual work, to provide them with opportunities for labour and to give them a chance to earn while studying. Under the scheme, repair and colour washing of school buildings, repair of school furniture and equipment is to be undertaken by the students themselves with the help and under the guidance of experienced artisans. Students who do such work are paid for their labour out of the allotment for repair charges for the institution concerned. Moreover, students undertaking other labour projects in the school whenever necessary, such as filling up pits or levelling the playgrounds, may also be paid for the work out of the games fund of the school. Every student and teacher is expected to take part, according to his fitness and capacity, in such constructive work as indicated above as well as in other types of activities like weaving, tree-planting, gardening, etc. Two periods per week are reserved in the school time-table for constructive work. There is provision in the scheme for service to the general public through such constructive activities as cycle repairs, making of signboards, bookbinding, watch repairs, decoration (for weddings and parties), and sale of the various products of the school. Every Secondary school student is expected to earn a certain amount during the year. The maximum sum is shown in the following table :—

Class	VI	VII	VIII	IX	X	XI
Minimum Sum	Rs. 50	Rs. 60	Rs. 75	Rs. 100	Rs. 100	Rs. 125
					XII	
					Rs. 125	

Some schools in other parts of the country also have some provision for constructive work or manual labour, although it is not a common practice to pay them for such work.

(i) *Scindia School, Gwalior* :—As part of the Physical education and physical fitness scheme of the school, boys are encouraged to put in manual labour. In the beginning the response was slow when it was on a voluntary basis, but for the last two years or so a compulsory 'labour unit' scheme has been introduced, and wherever work has been provided the boys have responded well. They do not however, like giving their holidays and Sundays for this kind of work; but whenever it is included in the school routine—whether it be in a school camp or as part of a project taken up by any one of their organisations—they are keen to work.

There is a Labour Organisation Committee on which the boys are represented. Every boy is required to complete his labour quota for the month. This quota varies according to the age of the boys. Boys may do the work at any time they like and those organising it find convenient. All work must be certified by either a member of the staff or a school prefect. One hobby period a month and one games period a week may be allowed off for completing the labour quota, but not more than five boys may be allowed off at a time from any games group. Most of the work has to be done on Sundays and during spare time. There are several categories of labour in which a boy may fulfil his quota. Among others are the following :—cutting grass and weeding; repairs to furniture and building; repairs to roads; cooking and serving; DDT spraying; attending upon the sick; preparing and rolling the games fields; village work; sanitation work; adult school work; cleaning and oiling school vehicles and machinery; help at the tuck shop and the cooperative grain shop.

Each boy is expected to do one unit of work per week or four units in a month. The weekly units for the different age groups are shown in the following table :—

Age group	11-13	13-16	16-18
Weekly unit	40 minutes	60 minutes	80 minutes

(ii) *Christian College School, Madras* :—This school reports : "It is important that a large variety of practical activities, including manual work, should be provided in the school so that boys may learn to work in cooperation, take on responsibilities and develop qualities of initiative and leadership. Among the different activities available for boys are : planting and looking after trees and

hedges ; maintaining lawns ; repairing roads ; helping in building work (recently they helped in building the school compound walls) ; arranging chairs for meetings and other social functions ; helping in the school canteen.

Beautifying the School

In this country, there is an unaccountable indifference towards making the school a pleasant and attractive place for children. In this respect, high standards are set by Christian missionary institutions, specially by Convent schools ; but the example seems to be wasted on the vast majority of our schools. The Report of the International Team on Secondary Education has some useful observations to make, which need to be heeded by our schools. "In Denmark, the United Kingdom and the United States we found special attention being given to make the school and its surroundings beautiful. The classrooms were invariably well lighted and well ventilated and the classroom walls were painted in attractive and soothing colours. In the Danish schools in particular, beautiful plants, flowers, pictures and sculptures were generally used to make the classrooms and corridors cheerful and attractive. The pictures and sculptures exhibited were generally originals by reputed local artists or by the school children themselves. In some schools in India, too, we were impressed with the cleanliness of the buildings and the grounds and with the efforts to beautify classrooms ; but we were even more distressed to see many schools with dark, ill-ventilated, overcrowded and dreary classrooms. Good school accommodation, not necessarily expensive, but healthy and tasteful, is in itself a valuable provision for the wholesome development of the personalities of children and for the cultural improvement of society."

A few schools have reported special attention to this aspect of school organisation and have elicited the cooperation of their pupils in beautifying the school buildings and their surroundings.

(i) *Providence Girls' High School, Nagpur* :— "In order to inculcate in our pupils a liking for clean and beautiful surroundings and a sense of the dignity of manual labour as desired rightly by our national leaders, the cleanliness and attractiveness of the school has been entrusted to the pupils themselves. Each school class, from the primary to the matriculation, is responsible for the cleanliness of its own classroom and of a definite area of the premises and play-grounds. Most of the parents are appreciative of this plan as it effects a noticeable improvement in the general habits of cleanliness

of the children. Decoration drives are organised from time to time, and pupils are expected to find ways and means of a tasteful arrangement and decoration of their classrooms."

(ii) *Christian High School, Kharar* :—"The boys are encouraged to decorate their classrooms with their own work rather than with cheap decorations from the bazar. The decorations are arranged subjectwise under the supervision of the class teacher. This is done on a competitive basis. The decorations are added to daily, and at the end of the week the old ones are removed. Every day a committee of three boys and a teacher goes round to mark the decorations, and the class scoring the highest points at the end of the week is awarded a vase. With the decorations, the cleanliness of the rooms as well as of the boys is also taken into account.

The boys are also responsible for beautifying the school surroundings. Under the supervision of the teachers, they are encouraged to level the grounds, to plant trees and to grow flowers. We believe that this experiment in giving the boys a keenness for a clean and beautiful environment and developing in them an aesthetic sense has proved very successful."

(iii) *Christian College School, Madras* :—"Some boys had very little sense of cleanliness or beauty, and they would dirty the classroom and surroundings and spill ink on the furniture and floor. As a part of their general education it was necessary to teach them to practise the principle. 'We should leave our surroundings at least as clean as they were when we came in'.

Every class has been provided with brooms, brushes and dusters. The class is divided into squads, each squad taking on, in turn, the duty of keeping the classroom clean every day. On the last day of the session, each class is provided with sandpaper and wax polish and cleans the furniture in the room. Many of the boys take pride in trying to make their desks and chairs look better than they were when they joined the class. Some parents have reported that their children have learnt to keep the furniture at home also clean and shining."

CHAPTER V

EVALUATION AND GUIDANCE

The old concept of evaluation as examination of the amount of knowledge acquired by a pupil has given place to a new and wider concept. As the Secondary school has extended the range of learning that it tries to develop, a broader programme of evaluation has become necessary. Besides new understandings, new abilities and new attitudes and appreciations are now beginning to be emphasised in the curriculum. Co-curricular activities are gradually receiving more and more attention because of their significance for character training and personality development. It is being increasingly realised that the broader objectives of Secondary education cannot be evaluated solely by the older methods of testing. And so, evaluation today seeks some broader way of appraising learning and growth than by merely testing.

A good programme of evaluation should attempt to comprehend the full range of achievement and development of students. This it can do only if it is systematised and organised. There are at least four steps in the evaluative process, and all four need to receive proper attention. Firstly, the educator must be clear about the purposes or objectives to be achieved by a given activity or unit of work or item in a course. He must be aware not only of the sociological justification for his aims but also of their psychological appropriateness. He must know what the capacities of his pupils are and what are their interests, if he is to be satisfied that they can recognise these purposes as interesting, appealing and worth while. Secondly, he must be clear about the nature of the actual behaviour or performance of his students in achieving these objectives. In other words, he should be able to define his objectives in terms of observable student behaviour. This is not an easy matter, specially when it comes to such complex abilities as critical thinking or such abstract attitudes as tolerance of minority communities or acceptance of the lower castes. The third step is to decide the kind or kinds of situations in which the desired forms of behaviour will be revealed. He is well aware of the fact that learning and doing take place not only in the classroom but also in the corridors, in the assembly hall, on the playgrounds, on the way home, at home and in the clubs and other institutions in the community that this pupils attend. And so, he will realise the need for collecting his data in all these revealing situations. The fourth step is to ascertain what instruments or tools are needed for observ-

ing and recording the actions of students under all these varying circumstances. Obviously, paper-and-pencil tests will not be adequate for collecting all the data required. Use will have to be made of a variety of instruments and techniques such as observation check lists, anecdotal records, student diaries and time charts, questionnaires, self-rating scales and interviews.

Evidence of a new orientation among our educators as regards evaluation is now beginning to appear and is one of the most encouraging features of Secondary education today. If translated into practice, it could almost overnight effect a wholesome transformation in our schools. Some of this evidence may be usefully reported here.

To begin with, here are a few excerpts from the Report of the Hyderabad Secondary Education Workshop :—

“Evaluation is part and parcel of learning. It is in no sense functionally separated from it. Testing, marking, making records and reports are the most familiar aspects of evaluation. There are others which are less familiar but in certain respects equally important. These should also be considered and treated as factors for bringing about better learning.”

“The learner himself must share actively in his own evaluation. Learning is a purposeful conscious process. It is something that the learner does for himself consciously and purposefully and not merely something that happens to him. Therefore, the learner's own judgment and his awareness of his progress are of the greatest consideration, because these alone can improve learning.”

“All evaluation must be done in terms of purposes and objectives.”

“Examinations, to be useful tools for the wider educational objectives, should be changed in their techniques to cover as many aspects of growth and behaviour as possible.”

“A system of cumulative records covering personality, interests, co-curricular activities and attainments should be maintained for every pupil throughout the school career.”

The Report of the Workshop on Secondary Education held at Udaipur contains the following statements which are indicative of a new approach to evaluation :—

“The evils of the present examination system can be minimised by the improvement of the essay type test, the introduction of objective tests and sociometric methods and the recording of anecdotes from the children's lives. Entries made in cumulative record cards

will supply a fairly good picture of a child as a whole. The importance of a cumulative record cannot be over emphasised."

"Evaluation facilitates and improves learning and aids the teacher in guiding the all-round development of the child....The existing system of examinations ignores the social, moral, emotional and physical development of the child."

"Various methods of evaluation have been developed in the field of education. Standards have been established. Modern educationists have found these devices useful in evaluating the pupil's progress. It would be worth while for teachers to be familiar with these tools and to be able to use them properly in their classrooms." (The Report then goes on to discuss, one by one, the following evaluative techniques :—1. intelligence tests ; 2. achievement tests ; 3. aptitude tests ; 4. personality tests ; 5. tests of attitude and behaviour ; 6. rating scales ; 7. questionnaires and check lists ; 8. interviews ; 9. anecdotal records ; 10. autobiographical records ; 11. pupils' diaries or logs ; 12. case histories ; 13. sociometric techniques ; 14. the three wishes technique ; 15. projective techniques ; and 16. free association and dream analysis.)

"Since our aim is to understand the whole child, his potentialities, his achievements, his interests, his social adjustment, and some aspects of his personality characteristics, it is essential that we adopt proper evaluative procedures to assess the child more correctly than we do now."

The Report of the Ranchi Workshop on Secondary Education may also be quoted as evidence of the increasing interest in a broader programme of evaluation :—

"For all practical purposes it is desirable to think of evaluation as a means to an end and not an end point. It serves a double purpose ; it is a means of appraising the growth in all aspects of personality development and also of diagnosing the successes and failures which pupils encounter in their path of progress."

"It is evident that the importance of a complete and accurate evaluation programme, which will guide a teacher to modify his classroom procedure, to identify the pupils' strong and weak zones and to report their progress correctly, cannot be overemphasised. Teachers should evolve a well-planned programme which will ultimately provide valid and reliable evidence of their pupils' all-round growth."

Let us now examine the reports of some schools on experiments in the field of evaluation. Most of these, however, refer only to attempts to modify the system of examinations.

(i) *New Era School, Bombay* :—A record of every child's progress in his academic work, of his character and personality development, of his hobbies and interests, etc. is maintained throughout his school career on cards specially devised for the purpose. Daily classwork, assignments, periodic tests, surprise tests, new-type tests, etc. are being used, and an average of the marks obtained in all these forms the basis for promotion.

A general knowledge paper based on the regular film-shows, radio talks, weekly news-reading, excursions and outings is set for all the classes.

(ii) *Jeevan Bharati, Surat* :—The school maintains an annual work record of each pupil. In this record are noted the marks awarded by teachers (out of 20) every two months for homework, classwork, composition work and the general impression created by the student. At the end of the year these records are considered on a par with the results of the annual test, and the two taken together decide whether the student ought to be promoted or not.

(iii) *Vidya Bhawan, Udaipur* :—In this school, examinations are not the bugbear of young children that they are in most schools. Boys know that their promotion does not depend entirely on success at examinations. The groupmaster maintains a detailed record of the progress in studies, as in other aspects of life, of all the students in his charge. Once in two months each subject-teacher notes the progress of the boys in his subject, based on classroom work, both written and oral, and on monthly tests. There are also two examinations during the year. Promotion depends on the total attainment in (i) classwork, (ii) monthly tests, and (iii) the two examinations. Each of these three are given equal weight. Some time in April, before the annual examination, a staff meeting is held to take provisional decisions regarding promotions. It is decided to promote all those whose work throughout the year has been satisfactory. Similarly, detention is decided upon for those who are so weak that they would not be able to pull on in the next class. But this is provisional and subject to revision after the final examinations. Thus, no single examination nor both the examinations taken together are the sole deciding factors ; and the boys know this. Therefore, they neither ignore examinations and tests nor do they give them undue importance. They are freed from the last minute cramming of selected topics which is characteristic of the examination system.

The success of this new system depends almost entirely on the integrity of the teacher and his ability to pay individual attention. But without integrity even the present-day examination system

would also break down. The system adopted in Vidya Bhawan enables a much fairer assessment to be made of a student's progress and also tends to rectify the other defects of the examination system.

(iv) *Christian High School, Kharar* :—“For testing the attainments of each boy in the school subjects, weekly tests are held on the first working day of the week in a period of 40 minutes. These are planned beforehand so as to give at least two tests in each subject per term. The students are tested in the portion that has been covered during the period since the last test was held in that subject. This has helped the boys to be free from the dread of examinations since these tests are held in a classroom atmosphere and not in the atmosphere of the examination hall. We do have an annual examination for promotion, but the marks of these tests are also considered in deciding promotions. We would very much like to base the annual promotion on these test marks, but the department does not permit that, though recently there have been statements from responsible persons in the department that the schools may be left more free to experiment on these lines.”

(v) *Scindia School, Gwalior* :—The school has experimented with awarding some marks for classwork (as judged by monthly tests and periodical quizzes) and the rest for the annual examination. The percentage has sometimes been 50% for classwork and 50% for the annual examination; at other times the school has tried awarding 40% marks for classwork and 60% for the annual examination. The following findings in the course of the experiment are worth noting.

1. It was found that there was a number of fairly intelligent boys keenly interested in the various school activities and leading on the whole a fuller community life than others who made a terrific last lap effort and did exceedingly well in the annual examination but lost their positions in the aggregate marks to the extent of near failure.

2. On the other hand, there was an almost equal number of boys who began rather well and having assured themselves of the required pass percentage on the aggregate, slackened their efforts towards the end of the year and did not take their revision work seriously and hence did extremely poorly in the annual examination.

3. It was found that the monthly tests, confined as they were to a small course, enabled the boys to secure a higher percentage of marks than they were capable of securing over the entire course. This gave them an exaggerated sense of their achievement. When the classwork marks were added, it was found that often it was

the plodder who came on top and that the arrangement failed to give due credit to intrinsic ability and ultimate achievement over a long period.

4. In the case of quizzes it was found that the boys generally scored very high marks on them and comparatively much poorer marks in the essay type of tests. So from experience and adjustment, the teachers have evolved a system of scaling down the marks obtained on quizzes so as to balance the two types of tests. As there was a greater divergence in the higher sets of marks than in the lower, a graded scale has been evolved.

It has been realised that it is necessary so to plan the tests and the system of marking as not to give pupils an exaggerated sense of their achievement without depriving them of the credit due for regularity in their work. The monthly tests may now also include questions on work done previously, and the marking is now less liberal.

(vi) *N.M.V. High School, Poona* :—A new system of periodical tests has been in operation in the school since the year 1950-51. Under this system the total performance of the pupil throughout the year is taken into consideration.

1. In every subject there are six short tests of 20 marks each, two tests of 40 marks each and one long test of 100 marks at the end of the year covering the whole syllabus for that subject. Thus, 300 marks are allotted for tests in each subject.

2. For English, Marathi, Sanskrit and Mathematics, marks are reserved for homework. Homework in the three languages is given twice a week and in Mathematics every day. 100 marks are reserved for homework in each of the languages and 200 marks for Mathematics. Homework of a mechanical nature is generally given to get over the problem of correction.

3. 50 marks are reserved for fair composition note-books in each language, and 50 marks are reserved for practical work in History, Geography and Science.

4. The marks for passing are 50% of the total allotted to each subject.

5. Papers are set on the part of the syllabus fixed for the particular test. Nearly three-fourth of the questions are set on the portion prescribed for that period, and one-fourth on the portion set for the previous tests. Questions set for the last test are based on the whole syllabus.

6. When the short tests carrying 20 marks are held, all the subjects are tested in a day and a half. This practice ensures that the pupil does not neglect the study of any subject, even temporarily, if he wishes to do well.

A study of the results since the new system was started shows that the boys have shown an all-sided improvement in all subjects. Most of the boys favour the new system since it has done away with the dread of the annual examination. The guardians too have mostly expressed their approval. They have testified to greater regularity in studies by their wards. A few, however, have complained that more time was being spent by their wards in home-work and practical work and that they could not therefore find much time for general reading.

(vii) *Banasthali Vidyapith* :—The following methods of testing the progress of the students are followed in the Vidyapith :—

1. Recording monthly progress: Besides the traditional system of written examinations, the Vidyapith follows a special system of maintaining records of the monthly progress of every student in every subject. At the time of deciding the promotion of the students at the end of the session, due weight is given to these monthly records. The monthly record is kept not on the basis of written monthly tests in which marks are given but by making a suitable remark about the student's work at the end of the month on the basis of his work throughout the month. It has been noticed that when written monthly or fortnightly tests are held, students take them light and their importance is not clearly realised by them.

2. Running oral tests: The Vidyapith has also followed a special method of its own for testing the general attainment of the class as a whole. The teacher first selects some key questions on the subject to be discussed. The questions are such as can be answered in brief but would call for a basic appreciation of the subject matter. The questions are put to the class verbally and the answers are also given verbally by the students. The teacher on hearing the answers makes the necessary corrections, clarifications and improvements. The students relish such oral questions and their interest is thus kept up. The subject matter is made quite clear to them and the central ideas they are expected to grasp in the course of learning a subject are well impressed upon them. In the process a fairly correct judgment about the general attainment of the class is formed. The method is particularly applicable to the social sciences and to general science.

(viii) *Shreyas, Ahmedabad* :—“The best indication of a child's progress is the personality he develops. We supplement our aware-

ness of this by an acquaintance with the pupil's check-up register and notebooks subjectwise, the written reports of the teachers, and the weekly discussions at the staff meetings. There are no examinations until the 13 plus age level, but a significant record emerges as we check up at the end of each week, month and term. At the exhibition held at the end of each term, the courses covered by a child during the term, his books and his work (notebooks, drawings, etc.) are shown to his parents who also receive a terminal report about him."

It should be noted that in this school the children proceed at their own rate in the different subjects. Reference has been made to this special feature of the school in chapter II.

Adjustment Classes

Two schools have reported arrangements for helping backward students in certain subjects to come up to the standard of the class.

(I) *Government I.E.M. School, Mehkar* :—According to most teachers the factors responsible for poor achievement by students are (i) big classes, (ii) the indifference of pupils towards studies and (iii) lack of cooperation of their guardians. Though these factors do count, the real causes of backwardness appear to be (i) indifferent instruction, (ii) the defective examination system and (iii) wide individual intellectual differences among pupils. In the experiment conducted in this school, remedies have been applied to correct these defects.

Firstly, the headmaster does more supervision and gives positive guidance to the teachers. The District Inspector of Schools also gives considerable guidance by observing lessons and holding staff meetings. Lesson notes are insisted on and the headmaster scrutinises these carefully. Model lessons are also arranged.

Secondly, the monthly tests are of a diagnostic value, so that they reveal pupils' weaknesses and also defects in instruction. New type tests have been found to be very suitable for this purpose. Remedial treatment is given through tutorial classes. In the time-table one period every day is set apart for individual attention to weak students. Occasionally, the headmaster tests a class to see whether the progress of the students is real.

The preparation of new type tests has one other advantage : in the process, the teacher has to thoroughly analyse his subject-matter, and this helps him to develop a deeper understanding of his subject. Moreover, the remedial instruction given to the weak students has a salutary effect on the teacher's methods in the general classroom,

inasmuch as the teacher has to devise ways and means to teach difficult points to the satisfaction of his pupils. The pupils, too, appear to be more responsive in the smaller tutorial classes than in the presence of their superior class fellows. They can proceed at a slower pace according to their capacity to grasp the points which they failed to do in the general classes.

Individual differences in ability is the greatest single factor contributing to large scale failures. When, in addition, the teaching and testing is geared to the average or the above-average child, the result is that the slower ones begin to lag behind and after some time—if no attention is paid to them individually—they give up the job as hopeless. The Mehkar scheme envisages that such big arrears will not be allowed to accumulate. By holding frequent diagnostic tests in the more important subjects, the weaker pupils are hunted out and special attention is paid to them.

(II) *Christian College School, Madras*—The mathematics teachers have prepared a set of 20 diagnostic tests in Mathematics. When these tests are applied the weaknesses of the students are brought to light. Tutorial classes are arranged for these students to help them remedy their defects. There is no additional charge for attending these classes.

Personality Tests

The total evaluation of a pupil's development includes an evaluation of his character and personality. One school—the Vasanta College for Women, at Banaras,—has experimented with tests of personality. The school reports that tests have been prepared to judge the intellectual capacities and the behaviour habits of pupils. The main heads under which these tests may be classified are : (i) tests of personal qualities, (ii) tests of intellectual qualities and (iii) tests of civic qualities. In addition, for use in the intermediate classes, self-inspection tests have been prepared for studying the students' bodily habits, nervous tendencies, intellectual habits, religious propensities and interests in games, sports, etc.

Record of Personality Development

The Banasthali Vidyapith has prepared a form to record the development of the total personality of its students. Special care is taken in filling up the form. The method adopted is as follows : The superintendent of the hostel, the principal or his nominee according to the school class concerned, and the group teacher who is supposed to collect information from various sources about the students in his charge, all sit together and discuss their impressions about each student. On the basis of this discussion entries are made

in the personality record form. This takes a good deal of time ; but it is felt that without giving this so much time and thought to this work there is every chance of the record being incorrect and undependable.

Aptitude Tests

The use of aptitude tests will become urgent when multiple courses are provided in our Secondary schools ; and so it is time that our schools began to give more thought to this problem. Only one school has reported work in this particular field. The Vasanta College for Women, Banaras, has drawn up tests for assessing special aptitudes in Art, Crafts, Music, Dancing and Dramatics.

Vocational Guidance

Vocational guidance, in this country is still in its infancy, and there are several factors, economic and administrative, that stand in the way of an early and effective implementation of guidance programmes on a large scale. But the reorganisation of Secondary education which has recently been initiated makes it necessary to take the first steps in the provision of guidance facilities to Secondary school children. The multipurpose schools will provide a variety of courses from among which children will need to be helped to make proper choices. Although the individual child and his parents have to take the final decision regarding what specific vocation he should follow, the school can and should reveal to pupils and to parents the vocational opportunities, their requirements, possibilities and limitations, and also frankly give information regarding the fitness—intellectual, physical, social and emotional—of the pupil to be successful in the vocational field toward which he is most attracted. Where possible, the school can also quite properly and helpfully participate in placement and in follow-up.

That there is an awareness of the urgent need for providing guidance to Secondary school students is evident from the interest evinced by teachers, headmasters and educational administrators in this problem. For example, the Report of the Workshop on Secondary Education held at Udaipur states : "With regard to the urgency of the problem, we feel that guidance is urgently needed at the Secondary school level. This group is generally ten to 17 years of age which covers the adolescent period of the learner's life, and the entire future career may be made or marred during this most formative period of life. A pupil is usually baffled in planning his future educational programme without proper guidance. Many students will fail to select the types of courses or vocations in harmony with their own abilities, desires and resources."

In actual school practice, however, very little effort is noticeable in providing educational or vocational guidance to pupils. The restraining factors seem to be the unpreparedness and inability of teachers to help students in this direction and the non-availability of the necessary tools for the purpose. The following attempts made in two schools to provide vocational guidance should therefore be of special interest :—

(i) *Birla Vidyamandir, Naini Tal* :—"Vocations, classified as intellectual, administrative, practical, social and political, demand specific qualities that determine suitability for one vocation or the other.

The first step towards vocational guidance being made possible requires that such different qualities of physique, talent, ability, temperament and character be developed. Our vocational guidance therefore rests on our entire educational scheme as its basis. The diversity of various natural gifts find its appropriate way of self-expression in our many-sided, specified educational scheme. Such a type of education represents already in itself direct vocational guidance because as such it helps the individual to discover for what he is predominantly and essentially suited.

The second step is the individual psychological record that is kept by the principal. For each and every student a separate file is maintained. Copies of the half-yearly and the annual examination results, notes on special prizes or achievements, special abilities and character features, conduct and social attainments, initiative, perseverance, courage, steadiness, persistence, concentration, politeness, present or lacking, such and similar observations by the principal, staff, house-masters and matrons find regularly their way to the particular file of a particular student. This psychological library of the school represents a careful collection of psychological tests which are not set in any artificial or theoretical manner but by the testing occasions that life itself presents. Such tests are the real tests. On the basis of the individual psychological record, the principal writes his half-yearly and annual 'remarks' to the guardians. On the basis of such intimate information vocational guidance is rendered.

For candidates intending to appear for the Joint Services Wing and other similar examinations, a board of interviewers is formed every session with a view to give them training in being interviewed. The board conducts its training on the lines on which the candidates are interviewed by the Joint Services Wing or the State and Union Public Service Commissions."

(ii) *Hansraj Morarji Public School, Bombay* :—“This being exclusively a residential school, it has the advantage of observing the many-sided progress of the pupils in every detail. Almost all teachers are provided with accommodation in the school with the pupils as housemasters. As each housemaster has not more than 20 pupils in his charge, he is in a good position to watch the progress of the boys in every respect. He maintains an individual record of every boy in his charge, giving all possible details about his all-round progress. The housemaster is expected to fill in these records carefully and to make his own observations and remarks from time to time. The Principal calls for these records at the end of each term and records his own remarks.

These individual records show the disposition, aptitudes, habits, ambitions and aspirations of the pupils, serving thereby as a guide to the Principal in advising the boy for the selection of a suitable career in life. The Principal discusses the records of the boys with the housemasters and the parents or guardians before finally advising the boys in the selection of their future careers.”

Self-Evaluation by Schools

It is an extremely useful practice for schools to take stock of themselves from time to time. The stock-taking, to be really useful, should be as comprehensive as possible, as piecemeal evaluation is continuously going on. The purpose of such self-evaluation is naturally an attempt at self-reform. An interesting experiment in this direction has been reported by the U.L.C.M. High School at Guntur.

In his preface to the printed report of this experiment, Mr. A. T. Fishman, Chairman of the Department of Education at the Andhra Christian College, Guntur, says : “Any one at all interested in education is certain to be attracted to any school where reform is going on. And if the elimination of evils and weaknesses and the introduction of things not only new but also better are being carried out by the staff of the school, that is even more noteworthy ; for, since self-help is the best help, surely self-reform is the best reform.” Mr. Fishman then suggests very rightly that such self reform should be a truly cooperative effort in which not only the staff and the students but also the parents and the community whole-heartedly participate.

For purposes of the self-evaluation project at the U.L.C.M. High School, the members of the staff grouped themselves into five committees to study the following five problems :—

1. Discipline

2. Methods of Teaching
3. Examinations and Evaluation
4. Character Education
5. Extra-curricular Activities

The workshop technique was followed, and each committee, at the end of its study, made some recommendations for improving the existing state of affairs. The headmaster reports : "Our teachers were impressed by the workshop method of group-thinking, group-planning and group-acting leading to 'democracy in action'."



CHAPTER VI

SCHOOL AND COMMUNITY

One of the defects of the Secondary school today, specially of the urban Secondary school, is its virtual isolation from the community, with the result that it fails to create in its pupils social sensitiveness which is at the basis of social justice and of social service. One of the major responsibilities of the school is to help its pupils to know and to appreciate their social environment; another is to provide them with opportunities to be of some service to society. As by far the greater and the more backward part of India is rural, students in urban schools need to have an understanding and a sympathetic appreciation of the problems of rural India if they are to help, when they grow up, in furthering the *sarvodaya* ideal of a casteless and classless society. In this chapter we shall examine the kinds of efforts that have been made by some schools in this direction.

(i) *Jeevan Bharati, Surat* :—The school arranges a “social service week” every year at the time of *Gandhi Jayanti*. In that week no regular teaching is done in the classroom, but pupils are divided into different groups and select some activity from the following and work at it :—

1. Social service among the backward population of the town, such as *safai*, anti-mosquito campaigns, bathing young children, attending on the sick, putting up entertainment programmes.
2. Exhibiting health and educational films.
3. Selling Gandhian literature.
4. Going to villages in the neighbourhood and helping the villagers in their work, such as cooking, washing clothes, cleaning utensils, etc.
5. Serving the school by colour-washing the building, polishing the furniture, etc.
6. Non-stop mass spinning.

(ii) *New Era School, Bombay* :—Every year the school appeals to its pupils and teachers to bring their discarded clothes. Some 2,000 to 2,500 pieces of clothes, some of them quite new, are thus collected and sent to various centres of social work where they are distributed among the poor and the needy. Besides, every Friday at the morning assembly a collection is made for the Mahatma

Gandhi Fund, which is a fund for the poor. Children contribute freely from their pocket money. Activities like these help pupils feel that they should try to be useful in their own small way to their indigent brethren living far away from them.

(iii) *The Doon School* :—Every boy over 13 years of age is expected to put in 45 minutes of social work per week. This may consist of cleaning up the school estate, work in the school or house garden, arranging books in the school library or help in constructing something for the school. Some years ago the boys built an open air theatre.

Besides this service for the school, the boys may also work for the welfare of the school servants or in the *Harijan* village nearby that has been adopted by the school, or they may work on a play for raising money for the welfare of the poor.

There is a school *Dehat Sabha* of which every boy is a member and to which he contributes one rupee every year from his pocket money. Some of the members go twice a week to the village adopted by the school. In this village they have built a school and a tank, and have made close contacts with the villagers.

Relief parties consisting of masters and boys are sometimes sent to areas in distress where and when help is welcomed.

(iii) *Vidya Bhawan, Udaipur* :—An outstanding feature of the activities organised by the Panchayat of the Students' Assembly is the 'school labour service'. This programme is also organised on special occasions such as Republic Day, Independence Day, Gandhi Jayanti and Gandhiji's death anniversary. The activities undertaken include planting of trees, road repairs and erection of platforms.

Occasionally this labour service is arranged in a neighbouring village where the students undertake the cleaning of lanes, the digging of manure pits, the making of drains, etc.

(iv) *The Arundale Adult Education Centre* :—The centre has sought the cooperation of three other institutions in its programme of activities. The cooperating institutions are the Besant Theosophical High School, the Olcott School and the Avvai Home. The field of action consists of three caste villages around the Theosophical Society, three *Harijan* hamlets and one fisherfolk village, with a total population of about 5,000. In two villages the centre has been able to re-arrange the village around a civic square consisting of a well, a school and a temple for the common good of the villagers. An educational census of all the villages has been taken.

For children below seven years of age, medical aid and play-centres have been provided and arrangements made for their personal cleanliness. For boys and girls of school-going age, i.e. between seven and 14, there is provision for free education, games, scouting, *bhajans* and religious instruction. Other activities that have been organised include : (i) animal welfare, through provision of water facilities, fodder and medical aid ; (ii) health and sanitation, through facilities for swimming, exercises, games and sports ; (iii) beautification of the villages, through the planting of trees, laying out of avenues, and cleaning up of public places like streets, temples, drains, etc.

(v) *Christian High School, Kharar* :—This school reports that the boys go out in parties under the supervision of a teacher to clean up certain mohallas in the town. They have also helped in filling up a pond in the town. The boys enjoy doing this kind of social service which has the effect of minimising the chances of developing snobbery in the children coming from well-to-do and better placed homes.

Opportunities for Rural Contacts

(i) *Banasthali Vidyapith* :—This school reports : “By organising visits to villages we enable our students to observe and understand the life of the village people. By inviting the village people to our functions and festivals and by doing social service for them we help to create in our students a sense of affinity and oneness with the village folk. All this also gives them such a living appreciation of our social and economic conditions as no amount of theoretical reading would be able to do.”

(ii) *Vasanta College for Women, Banaras* :—Besides trips to local places of interest like the water works and the ice factory, there is a major annual excursion to the neighbouring villages to give the girls an idea of village life. Each class organises one such excursion. These excursions are looked forward to with eagerness by the girls.

CONCLUSION

This report on experiments in Secondary education will give readers some idea of the kinds of things that can be attempted in our schools. It is by no means an exhaustive report. For one thing, it is based on the reports of some thirty institutions only that responded to the invitation to submit reports. For another, there are fields of experimentation in which nothing significant has been reported here. Examples of such fields are : the education of gifted children, the preparation of new-type tests, and the effective use of group procedures in the classroom.

I have a practical suggestion to make to heads of schools who read this report. They could organise a seminar of their own staff members to evaluate the educational programme of their respective schools in the light of the experiments reported here. Six groups could be conveniently formed, each group studying one of the six chapters contained in this report and formulating proposals for the improvement or enrichment of the existing programme of the school more or less on the lines of the 'self-reform' project undertaken by the U.L.C.M. High School, Guntur, reported in Chapter V. The reports of the several workshops on Secondary education and of the headmasters' seminars held during the last two years should prove useful for this purpose.

Appended to this report is a short bibliography of selected books that every Secondary school library would do well to have. A useful practice that may be recommended to schools is to provide for a staff meeting once a fortnight or at least once a month to discuss some of the valuable suggestions made in these books for better teaching and learning. Many schools have regular staff meetings for discussing the day-to-day routine problems of organisation and teaching ; but very few school staffs meet regularly to discuss ways and means of enriching the school programme and improving the methods of teaching. Our schools could be improved beyond recognition if only there were more opportunities for teachers and heads to come together to evaluate their efforts and to rethink their approach to education and teaching ; for, as Dr. Kimball Wiles has said, "an essential facet of creative improvement in our ways of working lies in a constant search for new ideas."

1. Wiles, Kimball, *Teaching for Better Schools*, p. 344, Prentice-hall, Inc., New York, 1952.

CONCLUSION
BIBLIOGRAPHY

1. Secondary School Organisation:

Faunce, R. A., *High School Administration*, Harper, 1955.
Jacobson, P. B., Reavis, W. C., and Logsdon, J. D., *The Effective School Principalship*, Prentice-Hall, 1955.

2. Secondary School Curriculum:

Alberty, H. B., *Reorganising the High School Curriculum*, Macmillan 1947.
Krug, E. A., *Curriculum Planning*, Harper, 1950.

3. Methods of Teaching:

Klausmeier, H. J., *Principles and Practices of Secondary School Teaching*, Harper, 1953.
Wiles, K., *Teaching for Better Schools*, Prentice-Hall, 1952.

4. Use of Audio-visual Aids:

Wittich, W. A., and Schuller, C. F., *Audio-visual Materials: Their Nature and Use*, Harper, 1953.
McKown, H. E., and Roberts, A. B., *Audio-visual Aids to Instruction*, 2nd ed., McGraw Hill, 1949.

5. Co-curricular Activities:

Gruber, F. C., and Beatty, T. B., *Secondary School Activities*, McGraw Hill, 1954.
Johnston, E. G., and Faunce, R. C., *Student Activities in Secondary Schools*, Ronald Press, 1952.
Thompson, N. Z., *Your School Clubs*, Dutton, 1953.

6. Evaluation:

Barr, A. S., Davis, R. A. and Johnson, P. O., *Educational Research and Appraisal*, Lippincott, 1953.
Shane, H. G., and McSwain, E. T., *Evaluation and the Elementary Curriculum*, Holt, 1951.
Committee of the Secondary Education Workshops, *Evaluative Criteria*. (Indian Secondary Schools Tentative Edition), United States Educational Foundation in India, 1954.

7. Guidance:

Rothney, J. W., *The Casebook in Guidance*, Dryden Press, 1952.
Kelley, J. A., *Guidance and Curriculum*, Prentice-Hall, 1955.

8. School-Community Relationships:

Olsen, E. G., *School and Community*, 2nd ed., Prentice Hall, 1954.
Williams, R. M., and Ryan, M. W., *Schools in Transition: Community Experiences in Desegregation*, University of North Carolina, 1954.

